STIC Search Report
EIC 2100

STIC Database Tracking Number: 130017

TO: John Lane **Location: 2Y13** **Art Unit : 2188** **Monday, August 23, 2004** **Case Serial Number: 09/918639**	**From: David Holloway** **Location: EIC 2100** **PK2-4B30** **Phone: 308-7794** **david.holloway@uspto.gov**

Search Notes

Dear Examiner Lane,

Attached please find your search results for above-referenced case.
Please contact me if you have any questions or would like a re-focused search.

David

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Set     Items   Description
S1    4945090   TRANSFER? OR COMMUNICATION? OR TRANSMIT? OR SEND? OR EXCHA-
            NG? OR RECEIV? OR DELIVER? OR TRANSMISSION
S2    4957032   THRESHOLD? OR LIMIT? OR HIGH? OR GREATEST? OR MOST? OR LON-
            GEST? OR LARGEST
S3     564934   CACHE? OR BUFFER? OR TEMPORAR?()(MEMOR? OR STORAGE) OR REG-
            ISTER?
S4         45   (SOCKET? OR ENDPOINT? OR CONNECTION?)(3N)(API OR MPI OR PR-
            OGRAM?()INTERFACE? OR MESSAGE()PASSING()INTERFACE? OR MPIS OR
            APIS)
S5      60682   REGISTRATION OR PREREGIST?
S6     232265   NOTIF? OR WARN? OR ALERT? OR ANNOUNC? OR ACKNOWLEDGE? OR M-
            ESSAG?
S7    2166331   EFFICIENC? OR EFFICAC? OR EFFECTIV? OR ABILIT? OR CAPABILI-
            T? OR PERFORMANC? OR SUITABILIT?
S8      56878   S1 AND S2 AND S3
S9      10219   S8 AND S7
S10        40   S9 AND S5 AND S6
S11         7   S4 AND S2
S12         3   S1 AND S3 AND S4
S13         3   S9 AND (API OR MPI OR APIS OR MPIS OR PROGRAM()INTERFACE? -
            OR MESSAGE()PASSING()INTERFACE?)
S14        18   S8 AND (API OR MPI OR APIS OR MPIS OR PROGRAM()INTERFACE?
            OR MESSAGE()PASSING()INTERFACE?)
S15         3   S10 AND IC=(G06F-015?)
S16        15   S10 AND IC=G06F?
S17        41   S11 OR S12 OR S13 OR S14 OR S15 OR S16
S18        41   IDPAT (sorted in duplicate/non-duplicate order)
S19        40   IDPAT (primary/non-duplicate records only)
File 347:JAPIO Nov 1976-2004/Apr(Updated 040802)
        (c) 2004 JPO & JAPIO
File 350:Derwent WPIX 1963-2004/UD,UM &UP=200453
        (c) 2004  Thomson Derwent
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19/5/3 (Item 3 from file: 350)
DIALOG(R)File 350:Derwent WPIX

016250112 **Image available**
WPI Acc No: 2004-408005/200438
Antialiasing apparatus and method thereof
Patent Assignee: UNIV YONSEI (UYYO-N)
Inventor: HAN T D; KIM B U; PARK U C; YANG S B
Number of Countries: 001 Number of Patents: 001
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
KR 2004011917	A	20040211	KR 200245233	A	20020731	200438 B

Priority Applications (No Type Date): KR 200245233 A 20020731
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
KR 2004011917	A		1	G06T-015/00	

Abstract (Basic): KR 2004011917 A
NOVELTY - An antialiasing apparatus and a method thereof are provided to **effectively** spare the size of a memory and a memory bandwidth while providing antialiased video of **high** quality.
DETAILED DESCRIPTION - A geometry processor(210) executes rotation, coordinate change, and size transformation as to three-dimensional model data **transmitted** through an **API** (Application **Program Interface**)(100). A rasterizer(221) transforms the three-dimensional model data into two-dimensional picture coordinates, and generates fragments as to polygonal data forming the three-dimensional model. A video generator(222) removes hidden surface of the generated fragments and executes an image mapping process for realistic images. A frame **buffer** (223) stores a coverage mask, a depth value, and a color value of a survived fragment in newly inputted fragments. An RUF(Recently Used Fragment) **buffer** (224) stores the coverage mask, an object tag, and the color value of the survived fragment.
pp; 1 DwgNo 1/10
Title Terms: APPARATUS; METHOD
Derwent Class: T01
International Patent Class (Main): G06T-015/00
File Segment: EPI

19/5/6 (Item 6 from file: 350)
DIALOG(R)File 350:Derwent WPIX

015786459 **Image available**
WPI Acc No: 2003-848662/200379
XRPX Acc No: N03-678250
Information notification **system selects** transmission **user whose related evaluation value is greater than specific value while** registering transmission **information, and accordingly** notifies registration **to selected user**
Patent Assignee: NTT DATA TSUSHIN KK (NITE)
Number of Countries: 001 Number of Patents: 001
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
JP 2003308458	A	20031031	JP 2002114837	A	20020417	200379	B

Priority Applications (No Type Date): JP 2002114837 A 20020417
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
JP 2003308458	A		18	G06F-017/60	

Abstract (Basic): JP 2003308458 A
NOVELTY - A database (31) **registers** related evaluation value indicating relation between **transmission** user and related user. The **notification** system (15) selects **transmission** user whose related evaluation value is greater than specific **threshold** value, when **transmission** information is **registered** in information share system (3). A **notification transmitter transmits** indication that **transmission** information has been **registered** to selected user.
DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:
(1) information **notification** method; and
(2) information **notification** program.
USE - For providing information **notification** through **communication** network such as internet.
ADVANTAGE - By using the simple and reliable system, **notification** information indicating that **transmission** information has been **transmitted** through a network, is **notified** to specific another related user **effectively** .
DESCRIPTION OF DRAWING(S) - The figure shows the block diagram of the information **notification** system. (Drawing includes non-English language text).
information share system (3)
notification system (15)
information **notification** unit (19)
related data update unit (27)
relationship database (31)
pp; 18 DwgNo 1/13
Title Terms: INFORMATION; **NOTIFICATION** ; SYSTEM; SELECT; **TRANSMISSION** ; USER; RELATED; EVALUATE; VALUE; GREATER; SPECIFIC; VALUE; **REGISTER** ; **TRANSMISSION** ; INFORMATION; ACCORD; **NOTIFICATION** ; **REGISTER** ; SELECT; USER
Derwent Class: T01
International Patent Class (Main): **G06F-017/60**
International Patent Class (Additional): **G06F-013/00**
File Segment: EPI

19/5/22 **(Item 22 from file: 350)**
DIALOG(R)File 350:Derwent WPIX

013110456 **Image available**
WPI Acc No: 2000-282327/200024
XRPX Acc No: N00-212483

API method for user-to-network interface signaling in ATM networks provides intelligent and flexible programming interface enabling higher **layer software to set up and tear down ATM connections more efficiently**

Patent Assignee: INVERNESS SYSTEMS LTD (INVE-N)
Inventor: MASEL J
Number of Countries: 001 Number of Patents: 001
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
US 6038611	A	20000314	US 986192	A	19980113	200024	B

Priority Applications (No Type Date): US 986192 A 19980113
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
US 6038611	A		10	G06F-013/00	

Abstract (Basic): US 6038611 A

NOVELTY - Method for implementing a user-to-network (UNI) application programming interface (API) capable of preceding information elements to be utilized by a conventional signaling stack, the method comprises the steps of: allocating a frame structure, the frame structure adapted to store a number of information elements; encoding one or more individual information elements into the frame structure.

DETAILED DESCRIPTION - The frame structure is stored, after all required information elements have been encoded, as a standard call profile in a table adapted to store a number of the standard call profiles; retrieving one of the standard call profiles from the table when a call is requested by a user application; copying the retrieved standard call profile from the table into a frame structure allocated by the user application; and returning the standard call profile previously retrieved to said table for possible use by other calls.

INDEPENDENT CLAIM is also included for the following:

(a) method of setting up a call utilizing a conventional signaling stack

USE - For ATM networks.

ADVANTAGE - The application programming interface (API) provides an intelligent and flexible programming interface which enables **higher** layer software such as user application software to set up and tear down ATM **connections** more efficiently. The **API** provides an efficient method of activating the standard signalling procedures such as UNI signalling as compared to the prior art method. Shared sets of parameters defining the setting up and the tearing down of calls are predefined by the user or provided as defaults by the API itself. Instead of requiring a user application to specify every single call related parameter, only the set of predefined parameters needs to be identified which significantly increases the throughput of the underlying signalling stack. Since the predefined sets of parameters are already encoded, the time required to process the call parameters is greatly reduced. In addition, the API is constructed to preserve the flexibility of the user application software, while at the same time, a user application has the option of exploiting predefined shared sets of parameter values.

DESCRIPTION OF DRAWING(S) - The **high** level block diagram illustrates the UNI signalling application programming interface (API) of the present invention within the framework of a typical ATM signalling software stack

pp; 10 DwgNo 3/4

Title Terms: METHOD; USER; NETWORK; INTERFACE; ATM; NETWORK; INTELLIGENCE; FLEXIBLE; PROGRAM; INTERFACE; ENABLE; **HIGH** ; LAYER; SOFTWARE; SET; UP; TEAR; DOWN; ATM; CONNECT; MORE; EFFICIENCY

Derwent Class: T01; W01
International Patent Class (Main): G06F-013/00
File Segment: EPI

19/5/31 (Item 31 from file: 350)
DIALOG(R)File 350:Derwent WPIX

010219527 **Image available**
WPI Acc No: 1995-120781/199516
XRPX Acc No: N95-095273
Multi-user broadcast mode data communication **system - involves broadcast** registration **and enforcement processing subsystem, database for use information table address table with updating of user state and performs control by** registration
Patent Assignee: NEC CORP (NIDE)
Inventor: TOPPER J
Number of Countries: 002 Number of Patents: 002
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
JP 7046237	A	19950214	JP 93190273	A	19930730	199516	B
US 5642483	A	19970624	US 94281118	A	19940728	199731	

Priority Applications (No Type Date): JP 93190273 A 19930730
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
JP 7046237	A		9		
US 5642483	A		10		

Abstract (Basic): JP 7046237 A

The data **communication** system consists of a broadcast **registration** processing sub-station (S1) and a broadcast enforcement processing sub-system (S3) with a broadcast **registration** table (T2). This indicates the presence of a **registered** user connected to the data **communication** network.

The user information data table (T1) stores the current state of each user. The address table (T4) is a database of address of related users who intimate change of user state under the control of broadcast enforcement processing system. The addresses corresponding to various address tables are stored in an address table (T3).

A user's state is updated in the information data table when the user initiates request for broadcast which is **registered** in the **registration** processing subsystem if the users related address table number is furnished. The broadcast **registration** is scanned from the top. On detection of the valid entry of user, a concerned address table number is read and the users state is **transmitted** to all users with related address. The broadcast routine is interrupted if the quantum of **messages** under **transmission** exceeds a maximum **limit** . If the entry is not re- **registered** the **message transmission** is resumed which periodic interruptions. If a fresh **registration** is carried out the broadcast is suspended and processing is taken up for the next valid user in order. The broadcast is terminated under control of the broadcast information processing subsystem.

ADVANTAGE - Simplifies database management of related address. Reduces band width requirements for **communication** . Provides updated user state information system.

Dwg.1/5

Title Terms: MULTI; USER; BROADCAST; MODE; DATA; COMMUNICATE; SYSTEM; BROADCAST; **REGISTER** ; PROCESS; SUBSYSTEM; DATABASE; INFORMATION; TABLE; ADDRESS; TABLE; UPDATE; USER; STATE; **PERFORMANCE** ; CONTROL; **REGISTER**
Derwent Class: T01; W01
International Patent Class (Main): **G06F-013/00** ; H04L-012/18
International Patent Class (Additional): **G06F-013/14** ; **G06F-015/177**
File Segment: EPI

19/5/32 (Item 32 from file: 350)
DIALOG(R)File 350:Derwent WPIX

010069180 **Image available**
WPI Acc No: 1994-336893/199442
XRPX Acc No: N94-264771

On-line system for system scram - involves disconnection of logic communication channel when communication resources shortage is detected during data communication

Patent Assignee: HITACHI LTD (HITA)
Number of Countries: 001 Number of Patents: 001
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
JP 6261095	A	19940916	JP 9346779	A	19930308	199442	B

Priority Applications (No Type Date): JP 9346779 A 19930308
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
JP 6261095	A		7	H04L-029/08	

Abstract (Basic): JP 6261095 A

The online system consists of a **transmitting buffer** pool (51), a **transmitting** control processor (52), a **receiving buffer** pool (53), a reception control processor (54), a **communication** management program interface table pool (55) and a logical **communication** channel **connection** and **communication** management **program interface** table pool for disconnection.

When **communication** resources, such as the interface table with the **buffer** , needed for data **communication** of online system becomes insufficient, the **communication** management program interface table secured in advance, disconnects the logic channels which detects shortage, thereby preventing system scram.

ADVANTAGE - Avoids input stop, output stop or system scram when **communication** resources shortage is detected.

Dwg.1/4

Title Terms: LINE; SYSTEM; SYSTEM; SCRAM; DISCONNECT; LOGIC; COMMUNICATE; CHANNEL; COMMUNICATE; RESOURCE; SHORTAGE; DETECT; DATA; COMMUNICATE
Derwent Class: T01; W01
International Patent Class (Main): H04L-029/08
International Patent Class (Additional): G06F-013/00
File Segment: EPI

19/5/35 **(Item 35 from file: 347)**
DIALOG(R)File 347:JAPIO

07340490 **Image available**
COMMUNICATION METHOD

PUB. NO.: 2002-208981 [JP 2002208981 A]
PUBLISHED: July 26, 2002 (20020726)
INVENTOR(s): MASHIERU FUREDERIKO
APPLICANT(s): HITACHI LTD
APPL. NO.: 2001-004399 [JP 20014399]
FILED: January 12, 2001 (20010112)
INTL CLASS: H04L-029/06

ABSTRACT

PROBLEM TO BE SOLVED: To obtain a **high** speed **communication** method using **socket API** or **MPI API** .

SOLUTION: Five novel functions are used. (1) The **receiving** side informs the **transmitting** side of a data length for determining which of reception at application data 202 or reception at a previously assigned **buffer** 242 is optimal. (2) An effect of informing the reception address of the application data 202 is calculated and information is suppressed if the effect is low. (3) A **communication** protocol enabling eight **communication** methods is used. (4) A **transfer** data length expected for **transmitting** / **receiving** operation is informed previously to the opposite party. (5) Previously assigned **buffers** 142 and 242 are altered (extension, contraction, addition, deletion, and the like) according to a **communication** pattern. According to these functions, **high** speed **communication** is attained while reducing the overhead of processing and the amount of memory being used.

19/5/37 (Item 37 from file: 347)
DIALOG(R)File 347:JAPIO

06090558 **Image available**
SYSTEM AND METHOD FOR **TRANSMITTING** DATA

PUB. NO.: 11-032074 [JP 11032074 A]
PUBLISHED: February 02, 1999 (19990202)
INVENTOR(s): TERAKITA KATSUJI
APPLICANT(s): INTERNATL BUSINESS MACH CORP <IBM>
APPL. NO.: 09-173350 [JP 97173350]
FILED: June 30, 1997 (19970630)
INTL CLASS: H04L-012/56; G06F-013/00; G06F-013/00; H04L-012/18

ABSTRACT

PROBLEM TO BE SOLVED: To **transmit** data by setting a **communication** link, without predetermining any 1st-order/2nd-order station in a distributed processing system using a **connection** oriented **API** .

SOLUTION: When an application program AP generates a connection request signal, a **communication** link A1 is turned into settable state (S100) and a **communication** link A2 is turned into an acceptable state (S102). It is determined (S104), whether the **communication** link A2 has been established or not, and when it is established, the **communication** link A2 is **registered** (S106) as a **communication** link A. In other cases, the setting of the **communication** link A1 is requested (S108). It is determined whether the **communication** link A1 has been established or not (S110), and when it is established, the **communication** link A1 is **registered** (S112) as the **communication** link A, but in the other case, the setting request of the **communication** link A2 becomes acceptable (S114).

```
Set     Items   Description
S1    4945090   TRANSFER? OR COMMUNICATION? OR TRANSMIT? OR SEND? OR EXCHA-
            NG? OR RECEIV? OR DELIVER? OR TRANSMISSION
S2    4957032   THRESHOLD? OR LIMIT? OR HIGH? OR GREATEST? OR MOST? OR LON-
            GEST? OR LARGEST
S3     564934   CACHE? OR BUFFER? OR TEMPORAR?()(MEMOR? OR STORAGE) OR REG-
            ISTER?
S4         45   (SOCKET? OR ENDPOINT? OR CONNECTION?)(3N)(API OR MPI OR PR-
            OGRAM?()INTERFACE? OR MESSAGE()PASSING()INTERFACE? OR MPIS OR
            APIS)
S5      60682   REGISTRATION OR PREREGIST?
S6     232265   NOTIF? OR WARN? OR ALERT? OR ANNOUNC? OR ACKNOWLEDGE? OR M-
            ESSAG?
S7    2166331   EFFICIENC? OR EFFICAC? OR EFFECTIV? OR ABILIT? OR CAPABILI-
            T? OR PERFORMANC? OR SUITABILIT?
S8      56878   S1 AND S2 AND S3
S9      10219   S8 AND S7
S10        40   S9 AND S5 AND S6
S11         7   S4 AND S2
S12         3   S1 AND S3 AND S4
S13         3   S9 AND (API OR MPI OR APIS OR MPIS OR PROGRAM()INTERFACE? -
            OR MESSAGE()PASSING()INTERFACE?)
S14        18   S8 AND (API OR MPI OR APIS OR MPIS OR PROGRAM()INTERFACE?
            OR MESSAGE()PASSING()INTERFACE?)
S15         3   S10 AND IC=(G06F-015?)
S16        15   S10 AND IC=G06F?
S17        41   S11 OR S12 OR S13 OR S14 OR S15 OR S16
S18        41   IDPAT (sorted in duplicate/non-duplicate order)
S19        40   IDPAT (primary/non-duplicate records only)
File 347:JAPIO Nov 1976-2004/Apr(Updated 040802)
        (c) 2004 JPO & JAPIO
File 350:Derwent WPIX 1963-2004/UD,UM &UP=200453
        (c) 2004  Thomson Derwent
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Set      Items   Description
S1     4945090   TRANSFER? OR COMMUNICATION? OR TRANSMIT? OR SEND? OR EXCHA-
             NG? OR RECEIV? OR DELIVER? OR TRANSMISSION
S2       94868   (SIZE OR LENGTH OR DATA OR DATABLOCK? OR MESSAG? OR BIT OR
             BYTE? OR MEGABIT? OR MEGABYTE? OR BLOCK? OR PACKET?)(2N)(THRE-
             SHOLD? OR LIMIT? OR BOUNDAR? OR HIGH? OR GREATEST? OR MOST? OR
              LONGEST OR LARGEST)
S3      564934   CACHE? OR BUFFER? OR TEMPORAR?()(MEMOR? OR STORAGE) OR REG-
             ISTER?
S4          45   (SOCKET? OR ENDPOINT? OR CONNECTION?)(3N)(API OR MPI OR PR-
             OGRAM?()INTERFACE? OR MESSAGE()PASSING()INTERFACE? OR MPIS OR
             APIS)
S5       60682   REGISTRATION OR PREREGIST?
S6      232265   NOTIF? OR WARN? OR ALERT? OR ANNOUNC? OR ACKNOWLEDGE? OR M-
             ESSAG?
S7     2166331   EFFICIENC? OR EFFICAC? OR EFFECTIV? OR ABILIT? OR CAPABILI-
             T? OR PERFORMANC? OR SUITABILIT?
S8       44046   S1 AND S2
S9           3   S4 AND S3
S10          1   S4 AND S2
S11       7076   S1 AND S2 AND S3
S12          4   S11 AND (API OR MPI OR PROGRAM?()INTERFACE? OR MESSAGE()PA-
             SSING()INTERFACE? OR APIS OR MPIS)
S13          7   S4 AND (THRESHOLD? OR LIMIT? OR BOUNDAR? OR HIGH? OR GREAT-
             EST OR MOST OR LONGEST OR LARGEST?)
S14          3   S1 AND S2 AND S3 AND S6 AND S5 AND S7
S15         16   S9 OR S10 OR S12 OR S13 OR S14
S16          0   S4 AND IC=(G06F-015/167 OR G06F-015/173)
S17          7   S4 AND IC=G06F-015?
S18         23   S15 OR S17
S19         23   IDPAT (sorted in duplicate/non-duplicate order)
S20         23   IDPAT (primary/non-duplicate records only)
File 347:JAPIO Nov 1976-2004/Apr(Updated 040802)
         (c) 2004 JPO & JAPIO
File 350:Derwent WPIX 1963-2004/UD,UM &UP=200453
         (c) 2004  Thomson Derwent
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20/5/5 **(Item 5 from file: 350)**
DIALOG(R)File 350:Derwent WPIX

015748376 **Image available**
WPI Acc No: 2003-810577/200376
XRPX Acc No: N03-649004

Virtual private network connection managing method, involves receiving call at connection **control** API **and operating** connection **manager to search for name to determine whether it has to be passed to current state object or not**

Patent Assignee: INT BUSINESS MACHINES CORP (IBMC)
Inventor: LUDOVICI D S; MELVILLE M J; MULLOCK R A; PAXHIA F V
Number of Countries: 001 Number of Patents: 001
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
US 6636898	B1	20031021	US 99240483	A	19990129	200376	B

Priority Applications (No Type Date): US 99240483 A 19990129
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
US 6636898	B1		19	G06F-015/16	

Abstract (Basic): US 6636898 B1

NOVELTY - The method involves receiving a call e.g. connection name at a **connection** control **API** and operating the API to create a command for a connection manager. A command object is received and sent to the manager. The manager is operated to search for the name within a list. The name is passed to the current state object if it is found. A new instance is created and passed to the current state object if the name is not in the list.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:

(a) a method for requesting information about an existing set of virtual private network connection (VPN) connections in a virtual private network

(b) a method for starting an active VPN connection responsive to a started command

(c) a method for refreshing keying material in an active VPN connection

(d) a program storage device readable by a machine, tangibly embodying a program of instructions executable by a machine for managing a single node VPN connection

(e) an article of manufacture for managing connections in a virtual private network

(f) a system for managing connections in a virtual private network.

USE - Used for managing virtual private network connections.

ADVANTAGE - The method controls access to the resources necessary to start the servers that manage VPN connections, and also controls access in the management of VPN connections. The method also determines which connections need to be started in a variety of ways.

DESCRIPTION OF DRAWING(S) - The drawing shows the system environment in which the VPN-CM method executes.

pp; 19 DwgNo 22/23

Title Terms: VIRTUAL; PRIVATE; NETWORK; CONNECT; MANAGE; METHOD; RECEIVE; CALL; CONNECT; CONTROL; OPERATE; CONNECT; MANAGE; SEARCH; NAME; DETERMINE ; PASS; CURRENT; STATE; OBJECT
Derwent Class: T01; W01
International Patent Class (Main): **G06F-015/16**
File Segment: EPI

20/5/14 (Item 14 from file: 350)
DIALOG(R)File 350:Derwent WPIX
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013110456 **Image available**
WPI Acc No: 2000-282327/200024
XRPX Acc No: N00-212483

API method for user-to-network interface signaling in ATM networks provides intelligent and flexible programming interface enabling higher **layer software to set up and tear down ATM connections more efficiently**

Patent Assignee: INVERNESS SYSTEMS LTD (INVE-N)
Inventor: MASEL J
Number of Countries: 001 Number of Patents: 001
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
US 6038611	A	20000314	US 986192	A	19980113	200024	B

Priority Applications (No Type Date): US 986192 A 19980113
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
US 6038611	A		10	G06F-013/00	

Abstract (Basic): US 6038611 A

NOVELTY - Method for implementing a user-to-network (UNI) application programming interface (API) capable of preceding information elements to be utilized by a conventional signaling stack, the method comprises the steps of: allocating a frame structure, the frame structure adapted to store a number of information elements; encoding one or more individual information elements into the frame structure.

DETAILED DESCRIPTION - The frame structure is stored, after all required information elements have been encoded, as a standard call profile in a table adapted to store a number of the standard call profiles; retrieving one of the standard call profiles from the table when a call is requested by a user application; copying the retrieved standard call profile from the table into a frame structure allocated by the user application; and returning the standard call profile previously retrieved to said table for possible use by other calls.

INDEPENDENT CLAIM is also included for the following:

(a) method of setting up a call utilizing a conventional signaling stack

USE - For ATM networks.

ADVANTAGE - The application programming interface (API) provides an intelligent and flexible programming interface which enables **higher** layer software such as user application software to set up and tear down ATM **connections** more efficiently. The **API** provides an efficient method of activating the standard signalling procedures such as UNI signalling as compared to the prior art method. Shared sets of parameters defining the setting up and the tearing down of calls are predefined by the user or provided as defaults by the API itself. Instead of requiring a user application to specify every single call related parameter, only the set of predefined parameters needs to be identified which significantly increases the throughput of the underlying signalling stack. Since the predefined sets of parameters are already encoded, the time required to process the call parameters is greatly reduced. In addition, the API is constructed to preserve the flexibility of the user application software, while at the same time, a user application has the option of exploiting predefined shared sets of parameter values.

DESCRIPTION OF DRAWING(S) - The **high** level **block** diagram illustrates the UNI signalling application programming interface (API) of the present invention within the framework of a typical ATM signalling software stack

pp; 10 DwgNo 3/4

Title Terms: METHOD; USER; NETWORK; INTERFACE; ATM; NETWORK; INTELLIGENCE; FLEXIBLE; PROGRAM; INTERFACE; ENABLE; **HIGH** ; LAYER; SOFTWARE; SET; UP; TEAR; DOWN; ATM; CONNECT; MORE; EFFICIENCY
Derwent Class: T01; W01

International Patent Class (Main): G06F-013/00
File Segment: EPI

20/5/17 **(Item 17 from file: 350)**
DIALOG(R)File 350:Derwent WPIX

009967461 **Image available**
WPI Acc No: 1994-235173/199429
XRPX Acc No: N94-186004

Data message delivery **method for radio** communications **system using single frequency reuse networks - using network controller to coordinate system and selecting path by considering previously successful attempts to communicate with particular mobile**

Patent Assignee: MOTOROLA INC (MOTI)
Inventor: SCHOLEFIELD C
Number of Countries: 002 Number of Patents: 002
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
CA 2102027	A	19940503	CA 2102027	A	19931029	199429	B
US 5530913	A	19960625	US 92970735	A	19921102	199631	

Priority Applications (No Type Date): US 92970735 A 19921102
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
CA 2102027	A		25	H04B-007/26	
US 5530913	A		10	H04B-001/00	

Abstract (Basic): CA 2102027 A

The single frequency reuse radio data **communications** system is coordinated by a network controller and is adapted for reliable data **message delivery** to portables throughout a geographical area. The method involves attempting a **message delivery** to a portable over a reuse path. The absence of data **message** confirmation is detected indicating failure to **deliver** the **message** to the portable. In response to the absence of the data **message** confirmation, the **message delivery** is retried.

Preferably, the portable is **registered** on the non-reuse path. This is achieved by identifying, at the portable, a preferred path having a corresp. quality metric that satisfies a preferred threshold. The last quality metric for the last used path is assessed, the use of which results from a successful **delivery** to the portable. A **registration** packet is **transmitted** when the threshold is exceeded, specifying the preferred path.

USE/ADVANTAGE - Increases system **efficiency** by reducing number of unsuccessful attempts at **message delivery** .

Dwg.1/4

Title Terms: DATA; **MESSAGE** ; **DELIVER** ; METHOD; RADIO; COMMUNICATE; SYSTEM ; SINGLE; FREQUENCY; REUSE; NETWORK; NETWORK; CONTROL; COORDINATE; SYSTEM ; SELECT; PATH; SUCCESS; ATTEMPT; COMMUNICATE; MOBILE
Derwent Class: W01; W02
International Patent Class (Main): H04B-001/00; H04B-007/26
File Segment: EPI

20/5/20 **(Item 20 from file: 350)**
DIALOG(R)File 350:Derwent WPIX

007907994
WPI Acc No: 1989-173106/198924
XRPX Acc No: N89-132141
Interface system for small personal computer - includes programmable interface **driver for determining one or more blocks of data to be** transferred **and for generating command signals**
Patent Assignee: TWELVE METRE RES PT (TWEL-N); BACKUP BOX DEV CORP (BACK-N)
Inventor: MCKINNEY K; MCKINNEY K L
Number of Countries: 002 Number of Patents: 002
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
AU 8822202	A	19890316	AU 8722202	A	19870915	198924	B
CA 1308491	C	19921006	CA 577304	A	19880914	199246	

Priority Applications (No Type Date): AU 874350 A 19870915; AU 8722202 A 19870915; AU 8822202 A 19880914
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
AU 8822202	A		24		
CA 1308491	C			G06F-013/28	

Abstract (Basic): AU 8822202 A

The data **transfer** interface unit has a parallel data **communications** port for handling blocks of data for bidirectional **transfer** between the computer and one or more peripheral units. The computer includes a computer clock for generating a computer clock signal and the interface unit comprises a generator for producing one or more initial handshaking signals to initiate **communications** with a peripheral unit. A **buffer** temporarily stores one or more blocks of data to be **transferred** between the computer and the peripheral unit. An interface clock is responsive to the computer clock signal for generating an interface clock signal synchronous with it.

A **transfer** control initiates the start of a data **transfer** operation and begins the **transfer** of the data after a predetermined time delay from the time at which the start has been initiated, the time delay being an integral multiple of the time period of the interface clock signal. The **transfer** of one or more blocks of data is complete in a timer period less than the time period required to generate an error difference between the computer clock signal and the synchronous interface clock signal.

ADVANTAGE - Enables conventional parallel printer point eg on small personal computer, to be used as **high** speed bidirectional **data** port.

Title Terms: INTERFACE; SYSTEM; PERSON; COMPUTER; PROGRAM; INTERFACE; DRIVE ; DETERMINE; ONE; MORE; BLOCK; DATA; **TRANSFER** ; GENERATE; COMMAND; SIGNAL
Derwent Class: T01
International Patent Class (Main): G06F-013/28
International Patent Class (Additional): G06F-003/00; G06F-013/38
File Segment: EPI

20/5/21 **(Item 21 from file: 347)**
DIALOG(R)File 347:JAPIO

07340490 **Image available**
COMMUNICATION METHOD

PUB. NO.: 2002-208981 [JP 2002208981 A]
PUBLISHED: July 26, 2002 (20020726)
INVENTOR(s): MASHIERU FUREDERIKO
APPLICANT(s): HITACHI LTD
APPL. NO.: 2001-004399 [JP 20014399]
FILED: January 12, 2001 (20010112)
INTL CLASS: H04L-029/06

ABSTRACT

PROBLEM TO BE SOLVED: To obtain a **high** speed communication method using **socket API** or **MPI API** .

SOLUTION: Five novel functions are used. (1) The receiving side informs the transmitting side of a data length for determining which of reception at application data 202 or reception at a previously assigned **buffer** 242 is optimal. (2) An effect of informing the reception address of the application data 202 is calculated and information is suppressed if the effect is low. (3) A communication protocol enabling eight communication methods is used. (4) A transfer data length expected for transmitting/receiving operation is informed previously to the opposite party. (5) Previously assigned **buffers** 142 and 242 are altered (extension, contraction, addition, deletion, and the like) according to a communication pattern. According to these functions, **high** speed communication is attained while reducing the overhead of processing and the amount of memory being used.

```
Set     Items   Description
S1    1369376   TRANSFER? OR COMMUNICATION? OR TRANSMIT? OR SEND? OR EXCHA-
            NG? OR RECEIV? OR DELIVER? OR TRANSMISSION
S2     152402   (SIZE OR LENGTH OR DATA OR DATABLOCK? OR MESSAG? OR BIT OR
            BYTE? OR MEGABIT? OR MEGABYTE? OR BLOCK? OR PACKET?)(2N)(THRE-
            SHOLD? OR LIMIT? OR BOUNDAR? OR HIGH? OR GREATEST? OR MOST? OR
             LONGEST OR LARGEST)
S3     369741   CACHE? OR BUFFER? OR TEMPORAR?()(MEMOR? OR STORAGE) OR REG-
            ISTER?
S4        442   (SOCKET? OR ENDPOINT? OR CONNECTION?)(3N)(API OR MPI OR PR-
            OGRAM?()INTERFACE? OR MESSAGE()PASSING()INTERFACE? OR MPIS OR
            APIS)
S5      48803   REGISTRATION OR PREREGIST?
S6     183342   NOTIF? OR WARN? OR ALERT? OR ANNOUNC? OR ACKNOWLEDGE? OR M-
            ESSAG?
S7     995422   EFFICIENC? OR EFFICAC? OR EFFECTIV? OR ABILIT? OR CAPABILI-
            T? OR PERFORMANC? OR SUITABILIT?
S8         13   S1(S)S2(S)S3(S)S4
S9         12   S2(S)S3(S)S4(S)(S5 OR S6 OR S7)
S10        27   S4 AND IC=G06F-015?
S11        40   S8 OR S9 OR S10
S12        34   S11 AND IC=G06F?
S13        34   IDPAT (sorted in duplicate/non-duplicate order)
S14        34   IDPAT (primary/non-duplicate records only)
File 348:EUROPEAN PATENTS 1978-2004/Aug W03
         (c) 2004 European Patent Office
File 349:PCT FULLTEXT 1979-2002/UB=20040812,UT=20040805
         (c) 2004 WIPO/Univentio
```

14/3,K/3 **(Item 3 from file: 348)**
DIALOG(R)File 348:EUROPEAN PATENTS

00629779
Socket structure for concurrent multiple protocol access
Socketstruktur fur gleichzeitigen Mehrfach-Protokollzugriff
Structure de socket pour l'acces simultane a un protocole multiple
PATENT ASSIGNEE:
International Business Machines Corporation, (200120), Old Orchard Road, Armonk, N.Y. 10504, (US), (Proprietor designated states: all)
INVENTOR:
Sharma, Mohan Byrappa, 12148 Jollyvill Road No.316, Austin, Texas 78759, (US)
Yeung, Yue, 11714 D-K Ranch Road, Austin, Texas 78759, (US)
Cheng, Chungsiang, 10629 Floral Drive, Austin, Texas 78759, (US)
LEGAL REPRESENTATIVE:
Moss, Robert Douglas (34141), IBM United Kingdom Limited Intellectual Property Department Hursley Park, Winchester Hampshire SO21 2JN, (GB)
PATENT (CC, No, Kind, Date): EP 613274 A2 940831 (Basic)
EP 613274 A3 950118
EP 613274 B1 020403
APPLICATION (CC, No, Date): EP 94300677 940128;
PRIORITY (CC, No, Date): US 15366 930129
DESIGNATED STATES: DE; FR; GB
INTERNATIONAL PATENT CLASS: **G06F-015/16** ; H04L-029/06
ABSTRACT WORD COUNT: 142
NOTE:
Figure number on first page: 1

LANGUAGE (Publication,Procedural,Application): English; English; English
FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	EPABF2	471
CLAIMS B	(English)	200214	704
CLAIMS B	(German)	200214	709
CLAIMS B	(French)	200214	883
SPEC A	(English)	EPABF2	4321
SPEC B	(English)	200214	4375
Total word count - document A			4793
Total word count - document B			6671
Total word count - documents A + B			11464

INTERNATIONAL PATENT CLASS: **G06F-015/16** ...

...SPECIFICATION utilize the socket structure of the present invention, NetBIOS applications would be rewritten to the **socket API** to become the NetBIOS socket application 66. The standard local IPC socket application 64 and...document) (see image in original document)
Conventional socket creation starts with a call to the **socket API** . A domain table is searched for the address family, the type and protocol which is...

...invention. The process begins with a socket creation request 150 from an application to the **socket API** , the application wishes to send or receive data across the network. The command to the **socket API** for the request takes the form of socket=(AF, *, type, proto). "AF" refers to the...

...SPECIFICATION utilize the socket structure of the present invention, NetBIOS applications would be rewritten to the **socket API** to become the NetBIOS socket application 66. The standard local IPC socket application 64 and...is given in the code below:
Conventional socket creation starts with a call to the **socket API** . A domain table is searched for the address family, the type and protocol which is...

...invention. The process begins with a socket creation request 150 from an

application to the **socket API** , the application wishes to send or receive data across the network. The command to the **socket API** for the request takes the form of socket=(AF, *, type, proto). "AF" refers to the...

. 14/3,K/6 (Item 6 from file: 349)
DIALOG(R)File 349:PCT FULLTEXT

01129428 **Image available**

APPARATUS, METHOD, AND COMPUTER PROGRAM PRODUCT FOR TUNNELING TCP BASED CLIENT-SERVER APPLICATIONS

APPAREIL, PROCEDE ET PROGICIEL DE TUNNELLISATION DES APPLICATIONS CLIENT-SERVEUR A BASE DE PROTOCOLE TCP

Patent Applicant/Assignee:
COLLATUS CORPORATION, 2115 Butterfield Road, Suite 303, Oakbrook, IL 60523, US, US (Residence), US (Nationality)
Inventor(s):
YANG Guanghong, 6186 McAbee Road, San Jose, CA 95120, US,
Legal Representative:
SAWYER Joseph A Jr (et al) (agent), Sawyer Law Group LLP, P.O. Box 51418, Palo Alto, CA 94303, US,

Patent and Priority Information (Country, Number, Date):
Patent: WO 200451495 A1 20040617 (WO 0451495)
Application: WO 2003US37805 20031126 (PCT/WO US03037805)
Priority Application: US 2002430744 20021203; US 2003678347 20031003
Designated States:
(Protection type is "patent" unless otherwise stated - for applications prior to 2004)
AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CR CU CZ DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SK SL TJ TM TR TT TZ UA UG UZ VN YU ZA ZM
(EP) AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LU MC NL PT RO SE SI SK TR
(OA) BF BJ CF CG CI CM GA GN GQ GW ML MR NE SN TD TG
(AP) BW GH GM KE LS MW MZ SD SL SZ TZ UG ZM ZW
(EA) AM AZ BY KG KZ MD RU TJ TM
Publication Language: English
Filing Language: English
Fulltext Word Count: 5015

Main International Patent Class: **G06F-015/16**

Fulltext Availability:
Detailed Description

Detailed Description
... of the TCP based client/server application, a redirector process 5 1 0, and a **socket API** hooking component 515. Software components 5 1 0 and 515 implement the processing logic specified...

...redirector process 51 0 creates a connection with the service publishing/tunneling server 205.

TCP **socket API** hooking component 515 is a software module that is injected into the client process of the client/server application, the major purpose for this injected module is to monitor the **socket API** calls issued from the client process. For all **socket API** calls, gethostbyname(and connect(function calls are handled specially as shown in Figure 6, all other **socket API** calls will be passed through directly to the system TCP socket service, Figure 5 also...

14/3,K/18 **(Item 18 from file: 349)**
DIALOG(R)File 349:PCT FULLTEXT

00943681 **Image available**
ACCESS SYSTEM INTERFACE
INTERFACE DE SYSTEME D'ACCES
Patent Applicant/Assignee:
OBLIX INC, 18922 Forge Drive, Cupertino, CA 95014, US, US (Residence), US (Nationality)
Inventor(s):
KNOUSE Charles W, 285 Jaggers Drive, San Jose, CA 95119, US,
GUPTA Minoo, 18552 Favre Ridge Road, Los Gatos, CA 95033, US,
Legal Representative:
MAGEN Burt (agent), Vierra Magen Marcus Harmon & DeNiro LLP, 685 Market Street, Suite 540, San Francisco, CA 94105-4206, US,
Patent and Priority Information (Country, Number, Date):
Patent: WO 200277819 A1 20021003 (WO 0277819)
Application: WO 2002US8552 20020320 (PCT/WO US0208552)
Priority Application: US 2001814091 20010321
Designated States:
(Protection type is "patent" unless otherwise stated - for applications prior to 2004)
AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ
EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS
LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK SL TJ
TM TR TT TZ UA UG UZ VN YU ZA ZW
(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR
(OA) BF BJ CF CG CI CM GA GN GQ GW ML MR NE SN TD TG
(AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZM ZW
(EA) AM AZ BY KG KZ MD RU TJ TM
Publication Language: English
Filing Language: English
Fulltext Word Count: 35612

Main International Patent Class: **G06F-011/30**
International Patent Class: **G06F-012/14** ...

... **G06F-015/16** ...

... **G06F-015/173**
Fulltext Availability:
Detailed Description

Detailed Description
... if the number of connections to primary Access Servers falls below this threshold, the Access **API** will open **connections** to secondary Access Servers.

Debug on or off. The interpretation is up to the application...

14/3,K/21 **(Item 21 from file: 349)**
DIALOG(R)File 349:PCT FULLTEXT

00876799 **Image available**
ADAPTIVE DOWNLOADING TECHNOLOGY
TECHNOLOGIE DE TELECHARGEMENT ADAPTATIF
Patent Applicant/Assignee:
DAVIS ENGINEERING, 225 Kensington Way, San Francisco, CA 94127, US, US (Residence), US (Nationality), (For all designated states except: US)
Patent Applicant/Inventor:
DAVIS Emery, 225 Kensington Way, San Francisco, CA 94127, US, US (Residence), US (Nationality), (Designated only for: US)
Legal Representative:
CHANG Ya-Chiao (et al) (agent), Darby & Darby P.C., 805 Third Avenue, New York, NY 10022-7513, US,
Patent and Priority Information (Country, Number, Date):
Patent: WO 200210943 A1 20020207 (WO 0210943)
Application: WO 2001US23902 20010730 (PCT/WO US0123902)
Priority Application: US 2000628593 20000728
Designated States:
(Protection type is "patent" unless otherwise stated - for applications prior to 2004)
AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW
(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR
(OA) BF BJ CF CG CI CM GA GN GQ GW ML MR NE SN TD TG
(AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZW
(EA) AM AZ BY KG KZ MD RU TJ TM
Publication Language: English
Filing Language: English
Fulltext Word Count: 15725

Main International Patent Class: **G06F-015/16**
Fulltext Availability:
Detailed Description

Detailed Description
... packets travel through each layer of the TCP/IP stack. For WindowSTM applications, the Windows **Sockets API** (application programming interface) provides a common interface that communicates with the application layer, e.g...

14/3,K/23 **(Item 23 from file: 349)**
DIALOG(R)File 349:PCT FULLTEXT

00852780 **Image available**
REMOTE METHOD INVOCATION WITH SECURE MESSAGING IN A DISTRIBUTED COMPUTING ENVIRONMENT
APPEL DE PROCEDE A DISTANCE AVEC MESSAGERIE SECURISEE DANS UN ENVIRONNEMENT INFORMATIQUE REPARTI
Patent Applicant/Assignee:
SUN MICROSYSTEMS INC, 901 San Antonio Road, Palo Alto, CA 94303, US, US (Residence), US (Nationality)
Inventor(s):
SLAUGHTER Gregory L, 3326 Emerson St., Palo Alto, CA 94306, US,
SAULPAUGH Thomas E, 6938 Bret Harte Dr., San Jose, CA 95120, US,
TRAVERSAT Bernard A, 2055 California St., Apt. 402, San Francisco, CA 94109, US,
DUIGOU Michael J, 33928 Capulet Circle, Fremont, CA 94555, US,
Legal Representative:
KOWERT Robert C (agent), Conley, Rose & Tayon, P.C., P.O. Box 398, Austin, TX 78767-0398, US,
Patent and Priority Information (Country, Number, Date):
Patent: WO 200186395 A2-A3 20011115 (WO 0186395)
Application: WO 2001US15277 20010509 (PCT/WO US0115277)
Priority Application: US 2000202975 20000509; US 2000208011 20000526; US 2000209430 20000602; US 2000209140 20000602; US 2000209525 20000605; US 2000672145 20000927
Designated States:
(Protection type is "patent" unless otherwise stated - for applications prior to 2004)
AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CR CU CZ DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG UZ VN YU ZA ZW
(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR
(OA) BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG
(AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZW
(EA) AM AZ BY KG KZ MD RU TJ TM
Publication Language: English
Filing Language: English
Fulltext Word Count: 73082

Main International Patent Class: **G06F-009/46**
International Patent Class: **G06F-001/00** ...

... **G06F-009/54**
Fulltext Availability:
Detailed Description

Detailed Description
... a Java Virtual Machine. Most code-capable small clients run native code only. In acIdition, **most** small devices have litue more than flash memory or battery backed RAM as their sole...by security concems, which often must be addressed using native JVM dependent methods. The reflection **API** may provide a graph of objects, but is inefficient due to the number of calls...IBM Corporation. TSpaces extends the basic Linda TupleSpace frainework with real data management and, the **ability** to download new data types and. new semantic nmctionality. TSpaces provides a set of network **communication buffers** and a set of APIs for accessing
5
those **buffers** . Like many of the solutions discussed above, TSpaces therefore' uses a code-centric progranuning model...Releasing the gate may involve un-binding the gate from the first client process's **message** transport address (e.g. IP and/cir Port address). The gate may be stored in a gate **cache** or repository. A second. client process executing within the same device that desires to run...

. . . .service. To use the gate, the second client process may bind the gate to its **message** transport address, so that the **message** endpoint for the second client process is a combination of the gate narne and. the second client process's transport address. In another example, a client may **receive** a dynarnic; IP ad.dress (e.g. a mobile client). When the clienfs transport address...its resources exceeds a threshold. For example, a service may reduce its load by sending **messages** including OFF tags to one or more client gates. The client gates **receiving** the **messages** with OFF tags will stop sending **messages** to the service. Pending **messages** m the clients may be **buffered** or may be handled by intemal flow control inechanism.s. Once the service is able to handle more requests, (inverted exclamation mark)t may **send** **messages** to one or more clients with ON tags so that the clients may resume sending **messages** . In other embodiments, other flow control tags may be supported in addition to or instead of ON and OFF. Other flow control tags may indicate to reduce **message** flow or that **message** flow may be increased.

Message gates may be configured to perforin resource monitoring. For example...

14/3,K/32 (Item 32 from file: 349)
DIALOG(R)File 349:PCT FULLTEXT

00563387 **Image available**

METHOD, SYSTEM AND APPARATUS USING A SENSORY CUE TO INDICATE SUBSEQUENT ACTION CHARACTERISTICS FOR DATA COMMUNICATIONS

PROCEDE, SYSTEME, ET APPAREIL UTILISANT UN REPERE SENSORIEL POUR INDIQUER LES CARACTERISTIQUES D'UNE OPERATION SUIVANTE DE COMMUNICATION DE DONNEES

Patent Applicant/Assignee:
3COM CORPORATION,
Inventor(s):
LINCKE Scott D,
MARIANETTI Ronald II,
SIPHER Joseph K,

Patent and Priority Information (Country, Number, Date):
Patent: WO 200026760 A1 20000511 (WO 0026760)
Application: WO 99US25034 19991026 (PCT/WO US9925034)
Priority Application: US 98182945 19981029
Designated States:
(Protection type is "patent" unless otherwise stated - for applications prior to 2004)
CA JP AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE
Publication Language: English
Fulltext Word Count: 59725

Main International Patent Class: **G06F-003/14**
International Patent Class: **G06F-015/163**
Fulltext Availability:
Detailed Description

Detailed Description

... a whole new API however, the reliable message protocol will instead use the same Berkeley **sockets API** that's used for TCP and UDP. Berkeley sockets is the de-facto standard network API on most platforms.

Since both TCP and RMP are accessed through the Berkeley **sockets API**, there is very little layering that needs to be added on top of these two ...

...as I I I 0. The network library 1 1 1 0 provides a Berkeley **sockets API** for network 10 on the wireless communications device I 00.

The network library I I...

...message sockets utilize the RMP protocol.
171
Since RMP and TCP both use the Berkeley **sockets API**, the reliable message layer 635 API is essentially the Berkeley **sockets API**. Once a **socket** of the appropriate type has been opened, all other calls for reading and writing data, etc. are the same for the three protocols. There are certain usage restrictions in the **sockets API** that are observed (see below), but these restrictions can be applied equally to the socket...server 180. The local host port number will be specified as 0 - which tells the **sockets API** to pick the next unused local port number. Similar to sockets of type SOCK-DGRAM...

...Therefore, the RMP protocol is implemented as a layer on top of the built-in **sockets API**, but with more or less the same calling conventions and parameters as the **sockets API**.

On the wireless communications device 100, the RMP protocol is incorporated into the network I...

...STREAM) socket. This layer of code will have the same calling conventions as the standard **sockets API** and behave in the same manner. Each of the calls in this layer will have the name RMPxxxxx where

xxxxx is the name of the corresponding **sockets API** call. Nearly all of the RMP socket calls correspond to an equivalent **sockets API** call, except RMPReady(which is used to implement select(functionality. The select call is unique...1 0 plug-in, they will be labeled as Plxxxxx where xxxxx is the particular **sockets API** call that each one implements.

180
Plsocket
This call creates a new socket and returns...network. Once installed, any application can access the Wireless packet data network using the Berkeley **sockets API** of the network 3 0 library 1 1 1 0.

The network library I I...

...applications will be able to communicate over the wireless packet data network using the Berkeley **sockets API** of the network library I 1 1 0.

I 0 The wireless communications system operates...

14/3,K/33 **(Item 33 from file: 349)**
DIALOG(R)File 349:PCT FULLTEXT

00489750 **Image available**
MANAGEMENT AND CONTROL OF WIRELESS DEVICES
GESTION ET COMMANDE DE DISPOSITIFS SANS FIL
Patent Applicant/Assignee:
DYNAMIC MOBILE DATA SYSTEMS INC,
Inventor(s):
PETROV Andrew A,
LAROSA Mark I,
GERVASIO Patrick,
Patent and Priority Information (Country, Number, Date):
Patent: WO 9921102 A1 19990429
Application: WO 98US22049 19981019 (PCT/WO US9822049)
Priority Application: US 9763604 19971022; US 9768838 19971224; US 98173801 19981016
Designated States:
(Protection type is "patent" unless otherwise stated - for applications prior to 2004)
AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE ES FI GB GD GE GH GM HR HU ID IL IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT UA UG UZ VN YU ZW GH GM KE LS MW SD SZ UG ZW AM AZ BY KG KZ MD RU TJ TM AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG
Publication Language: English
Fulltext Word Count: 27385

Main International Patent Class: **G06F-015/163**
Fulltext Availability:
Detailed Description

Detailed Description
... The programming module 2 also extends the Windows OS by extending Winsock (short for Windows **Socket**), the default **API** provided by Windows, and provides wireless- ...socket is a conversation between two applications and not two wireless devices or two middleware **APIs** .

The **sockets** used by the present invention are optimized for wireless transmissions, and, preferably, the high-overhead...

```
Set     Items   Description
S1    7458842   TRANSFER? OR COMMUNICATION? OR TRANSMIT? OR SEND? OR EXCHA-
             NG? OR RECEIV? OR DELIVER? OR TRANSMISSION
S2     284365   (SIZE OR LENGTH OR DATA OR DATABLOCK? OR MESSAG? OR BIT OR
             BYTE? OR MEGABIT? OR MEGABYTE? OR BLOCK? OR PACKET?)(2N)(THRE-
             SHOLD? OR LIMIT? OR BOUNDAR? OR HIGH? OR GREATEST? OR MOST? OR
              LONGEST OR LARGEST)
S3     456965   CACHE? OR BUFFER? OR TEMPORAR?()(MEMOR? OR STORAGE) OR REG-
             ISTER?
S4        353   (SOCKET? OR WINSOCK? OR ENDPOINT? OR CONNECTION?)(3N)(API -
             OR MPI OR PROGRAM?()INTERFACE? OR MESSAGE()PASSING()INTERFACE?
              OR MPIS OR APIS)
S5      78856   REGISTRATION OR PREREGIST?
S6     953257   NOTIF? OR WARN? OR ALERT? OR ANNOUNC? OR ACKNOWLEDGE? OR M-
             ESSAG?
S7    7702918   EFFICIENC? OR EFFICAC? OR EFFECTIV? OR ABILIT? OR CAPABILI-
             T? OR PERFORMANC? OR SUITABILIT?
S8          3   S1 AND S2 AND S3 AND S4
S9          0   S2 AND S3 AND S4 AND S5
S10         2   S2 AND S3 AND S4 AND S6
S11         3   S2 AND S3 AND S4 AND S7
S12         0   S4 AND S5 AND S6 AND S7
S13         0   S4 AND S5
S14        47   S4 AND S6 AND S7
S15         3   S2 AND S3 AND S4
S16        48   S8 OR S10 OR S11 OR S14 OR S15
S17        26   RD (unique items)
S18        17   S17 NOT PY>2001
S19        17   S18 NOT PD>20010112
File   8:Ei Compendex(R) 1970-2004/Aug W3
         (c) 2004 Elsevier Eng.  Info. Inc.
File  35:Dissertation Abs Online 1861-2004/Jul
         (c) 2004 ProQuest Info&Learning
File 202:Info. Sci. & Tech. Abs. 1966-2004/Jul 12
         (c) 2004 EBSCO Publishing
File  65:Inside Conferences 1993-2004/Aug W3
         (c) 2004 BLDSC all rts. reserv.
File   2:INSPEC 1969-2004/Aug W3
         (c) 2004 Institution of Electrical Engineers
File  94:JICST-EPlus 1985-2004/Aug W1
         (c)2004 Japan Science and Tech Corp(JST)
File 111:TGG Natl.Newspaper Index(SM) 1979-2004/Aug 23
         (c) 2004 The Gale Group
File 233:Internet & Personal Comp. Abs. 1981-2003/Sep
         (c) 2003 EBSCO Pub.
File 144:Pascal 1973-2004/Aug W3
         (c) 2004 INIST/CNRS
File 434:SciSearch(R) Cited Ref Sci 1974-1989/Dec
         (c) 1998 Inst for Sci Info
File  34:SciSearch(R) Cited Ref Sci 1990-2004/Aug W3
         (c) 2004 Inst for Sci Info
File  99:Wilson Appl. Sci & Tech Abs 1983-2004/Jul
         (c) 2004 The HW Wilson Co.
File  95:TEME-Technology & Management 1989-2004/Jun W1
         (c) 2004 FIZ TECHNIK
```

19/5/1 (Item 1 from file: 8)
DIALOG(R)File 8:Ei Compendex(R)

05605318 E.I. No: EIP00075244684
Title: Distributed data interface in GAMESS
Author: Fletcher, Graham D.; Schmidt, Michael W.; Bode, Brett M.; Gordon, Mark S.
Corporate Source: NASA Ames Research Cent, Moffett Field, CA, USA
Source: Computer Physics Communications v 128 n 1 2000. p 190-200
Publication Year: 2000
CODEN: CPHCBZ ISSN: 0010-4655
Language: English
Document Type: JA; (Journal Article) Treatment: X; (Experimental)
Journal Announcement: 0008W5
Abstract: The Distributed Data Interface to permit storage of large data arrays in the aggregate memory of distributed memory, **message** passing computer systems is described. The design of this relatively small library is discussed, in regard to its implementation over SHMEM, **MPI** -1, or **socket** based **message** libraries. The good **performance** of a MP2 program using DDI is demonstrated on both PC and workstation cluster computers, and some details of the resulting **message** traffic are presented. (Author abstract) 34 Refs.
Descriptors: *Parallel processing systems; Distributed database systems; Interfaces (computer); Data communication systems; Quantum theory; Molecular dynamics; Parallel algorithms; Personal computers; Computer workstations; Telecommunication traffic
Identifiers: Distributed data interface; Software Package GAMESS; Software Package MP2; Quantum chemistry
Classification Codes:
722.4 (Digital Computers & Systems); 723.3 (Database Systems); 722.1 (Data Storage, Equipment & Techniques); 723.2 (Data Processing); 931.4 (Quantum Theory); 801.4 (Physical Chemistry)
722 (Computer Hardware); 723 (Computer Software); 931 (Applied Physics); 801 (Chemical Analysis & Physical Chemistry)
72 (COMPUTERS & DATA PROCESSING); 93 (ENGINEERING PHYSICS); 80 (CHEMICAL ENGINEERING)

19/5/2 (Item 2 from file: 8)
DIALOG(R)File 8:Ei Compendex(R)

05005074 E.I. No: EIP98044175444
Title: Performance **evaluation of communication software systems for distributed computing**
Author: Fatoohi, Rod
Corporate Source: San Jose State Univ, San Jose, CA, USA
Conference Title: Proceedings of the 1997 30th Annual Hawaii International Conference on System Sciences. Part 1 (of 6)
Conference Location: Wailea, HI, USA Conference Date: 19970107-19970110
Sponsor: IEEE
E.I. Conference No.: 48272
Source: Software Technology and Architecture Proceedings of the Hawaii International Conference on System Sciences v 1 1997. IEEE Comp Soc, Los Alamitos, CA, USA,97TB100234. p 100-109
Publication Year: 1997
CODEN: PHISD7 ISSN: 1060-3425
Language: English
Document Type: CA; (Conference Article) Treatment: T; (Theoretical)
Journal Announcement: 9806W4
Abstract: In recent years there has been an increasing interest in object-oriented distributed computing since it is better quipped to deal with complex systems while providing extensibility, maintainability, and reusability. At the same time, several new high-speed network technologies have emerged for local and wide area networks. However, the **performance** of networking software is not improving as fast as the networking hardware and the workstation microprocessors. This paper gives an overview and evaluates the **performance** of the Common Object Request Broker Architecture (CORBA) standard in a distributed computing environment at NASA Ames Research Center. The environment consists of two testbeds of SGI workstations connected by four networks: Ethernet, FDDI, HiPPI, and ATM. The **performance** results for three communication software systems are presented, analyzed and compared. These systems are: BSD **socket programming interface** , IONA's Orbix, an implementation of the CORBA specification, and the PVM **message** passing library. The results show that high-level communication interfaces, such as CORBA and PVM, can achieve reasonable **performance** under certain conditions. (Author abstract) 12 Refs.
Descriptors: *Computer software selection and evaluation; Data communication systems; Distributed computer systems; Computer architecture; Standards; Computer workstations; Asynchronous transfer mode; Local area networks; Interfaces (computer); Computer programming
Identifiers: Common object request broker architecture (CORBA) standards; Ethernet
Classification Codes:
722.4 (Digital Computers & Systems); 902.2 (Codes & Standards); 722.2 (Computer Peripheral Equipment)
723 (Computer Software); 716 (Radar, Radio & TV Electronic Equipment); 722 (Computer Hardware); 902 (Engineering Graphics & Standards)
72 (COMPUTERS & DATA PROCESSING); 71 (ELECTRONICS & COMMUNICATIONS); 90 (GENERAL ENGINEERING)

19/5/7 (Item 1 from file: 2)
DIALOG(R)File 2:INSPEC

6873711 INSPEC Abstract Number: C2001-04-6150N-096
Title: WSDLite: A lightweight alternative to Windows Sockets Direct Path
Author(s): Speight, E.; Shafi, H.; Bennett, J.K.
Author Affiliation: Lab. of Comput. Syst., Cornell Univ., Ithaca, NY, USA
Conference Title: Proceedings of the 4th USENIX Windows Systems Symposium p.113-24
Publisher: USENIX Assoc, Berkeley, CA, USA
Publication Date: 2000 Country of Publication: USA 136 pp.
ISBN: 1 880446 20 0 Material Identity Number: XX-2000-01987
Conference Title: Proceedings of 4th USENIX Windows Systems Symposium
Conference Date: 3-4 Aug. 2000 Conference Location: Seattle, WA, USA
Language: English Document Type: Conference Paper (PA)
Treatment: Practical (P)
Abstract: This paper describes WSDLite, a thin software layer that maps a useful subset of the **WinSock2 API** onto a system area network. The development of WSDLite was motivated by our experience with an early version of Windows Sockets Direct Path (WSDP). WSDP was developed by Microsoft to allow unmodified network applications to exploit the **performance** and reliability advantages of system area networks (SANs). This is accomplished through the use of a software "switch" that, when appropriate, redirects **message** traffic through the SAN provider protocol stack instead of the standard TCP/IP protocol stack. In addition to the **performance** advantages, the WSDP architecture offers several other benefits, including automatic support for legacy code, a single well-known API for supporting many different underlying SAN network protocols, and substantially simpler buffer management than that required by the native SAN API. The beta version of WSDP that we examined did not perform as well as expected, achieving only 26% of the native SAN throughput on the system studied. In an effort to determine whether or not this **performance** difference was intrinsic, we developed WSDLite, a simple alternative to WSDP. WSDLite is a user-level runtime library that implements a small but commonly used subset of the **WinSock2 API** . For those applications that do not require full WinSock2 functionality, WSDLite provides both the transparency of WSDP and much of the **performance** benefit of the underlying SAN architecture. In low-level network tests, WSDLite achieves an average of 70% of the native SAN **performance** . We describe the design of WSDLite, and present results comparing the **performance** of both parallel applications and low-level benchmarks using WSDLite, WSDP, TCP, and a native SAN programming library API as the network programming layer. (15 Refs)
Subfile: C
Descriptors: application program interfaces; distributed programming; local area networks; software libraries; storage management
Identifiers: WSDLite; Windows Sockets Direct Path; thin software layer; **WinSock2 API** ; system area network; system area networks; software switch ; **message** traffic; SAN provider protocol stack; TCP/IP protocol stack; legacy code; SAN network protocols; buffer management; user-level runtime library; parallel applications; TCP; network programming layer
Class Codes: C6150N (Distributed systems software); C5620L (Local area networks); C6150E (General utility programs); C6120 (File organisation)

19/5/9 (Item 3 from file: 2)
DIALOG(R)File 2:INSPEC

6020230 INSPEC Abstract Number: B9810-6210L-156, C9810-5620L-048
Title: High- performance **local area** communication **with Fast Sockets**
Author(s): Rodrigues, S.H.; Anderson, T.E.; Culler, D.E.
Author Affiliation: Comput. Sci. Div., California Univ., Berkeley, CA, USA
Conference Title: Proceedings of the USENIX 1997 Annual Technical Conference p.257-74
Publisher: USEXIX Assoc, Berkeley, CA, USA
Publication Date: 1997 Country of Publication: USA vi+318 pp.
ISBN: 1 880446 84 7 Material Identity Number: XX97-00129
Conference Title: Proceedings of USENIX 1997 Annual Technical Conference
Conference Date: 6-10 Jan. 1997 Conference Location: Anaheim, CA, USA
Language: English Document Type: Conference Paper (PA)
Treatment: Practical (P)
Abstract: Modern switched networks such as ATM and Myrinet enable low-latency, high-bandwidth **communication** . This **performance** has not been realized by current applications, because of the high processing overheads imposed by existing **communications** software. These overheads are usually not hidden with large **packets** ; **most** network traffic is small. The authors have developed Fast Sockets, a local-area **communication** layer that utilizes a high- **performance** protocol and exports the Berkeley **Sockets programming interface** . Fast **Sockets** realizes round-trip **transfer** times of 60 microseconds and maximum **transfer** bandwidth of 33 MB/second between two UltraSPARC 1s connected by a Myrinet network, Fast Sockets obtains **performance** by collapsing protocol layers, using simple **buffer** management strategies, and utilizing knowledge of packet destinations for direct **transfer** into user **buffers** . Using **receive** posting, they make the **Sockets API** a single-copy **communications** layer and enable regular Sockets programs to exploit the **performance** of modern networks. Fast Sockets transparently reverts to standard TCP/IP protocols for wide-area **communication** . (52 Refs)
Subfile: B C
Descriptors: application program interfaces; **buffer** storage; local area networks; storage management; transport protocols
Identifiers: high- **performance** local area **communication** ; switched networks; ATM; Myrinet; low-latency high-bandwidth **communication** ; processing overheads; **communications** software; network traffic; local-area **communication** layer; high- **performance** protocol; Berkeley **Sockets programming interface** ; round-trip **transfer** times; maximum **transfer** bandwidth; UltraSPARC 1; **buffer** management strategies; packet destinations; direct **transfer** ; user **buffers** ; **receive** posting; **Sockets API** ; single-copy **communications** layer; TCP/IP protocols; 60 ms ; 33 MB/s
Class Codes: B6210L (Computer communications); B6150M (Protocols); C5620L (Local area networks); C5640 (Protocols); C6150E (General utility programs); C6120 (File organisation); C5320G (Semiconductor storage)
Numerical Indexing: time 6.0E-02 s; byte rate 3.3E+07 Byte/s

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Set     Items   Description
S1   23143953   TRANSFER? OR COMMUNICATION? OR TRANSMIT? OR SEND? OR EXCHA-
             NG? OR RECEIV? OR DELIVER? OR TRANSMISSION
S2     789967   (SIZE OR LENGTH OR DATA OR DATABLOCK? OR MESSAG? OR BIT OR
             BYTE? OR MEGABIT? OR MEGABYTE? OR BLOCK? OR PACKET?)(2N)(THRE-
             SHOLD? OR LIMIT? OR BOUNDAR? OR HIGH? OR GREATEST? OR MOST? OR
              LONGEST OR LARGEST)
S3    3099711   CACHE? OR BUFFER? OR TEMPORAR?()(MEMOR? OR STORAGE) OR REG-
             ISTER?
S4       3623   (SOCKET? OR WINSOCK? OR ENDPOINT? OR CONNECTION?)(3N)(API -
             OR MPI OR PROGRAM?()INTERFACE? OR MESSAGE()PASSING()INTERFACE?
              OR MPIS OR APIS)
S5     850200   REGISTRATION OR PREREGIST?
S6   16730826   NOTIF? OR WARN? OR ALERT? OR ANNOUNC? OR ACKNOWLEDGE? OR M-
             ESSAG?
S7   15178386   EFFICIENC? OR EFFICAC? OR EFFECTIV? OR ABILIT? OR CAPABILI-
             T? OR PERFORMANC? OR SUITABILIT?
S8           0   S1(10N)S2(10N)S3(10N)S4
S9           0   S1(S)S2(S)S3(S)S4
S10         15   S1(S)S2(S)S4
S11          0   S2(S)S3(S)S4
S12         12   S4(S)S5
S13        600   S4(S)S6
S14         90   S13(S)S7
S15          0   S2(S)S3(S)S4
S16         18   S4(10N)S6(10N)S7
S17         96   S1(S)S2(S)S3(S)(SOCKET? OR WINSOCK? OR API OR MPI OR PROGR-
              AM()INTERFACE? OR MESSAGE()PASSING()INTERFACE?)
S18         28   S17(S)(S4 OR S5 OR S6)
S19         73   S10 OR S12 OR S16 OR S18
S20         47   RD (unique items)
S21         42   S20 NOT PY>2001
S22         40   S21 NOT PD>20011201
File 275:Gale Group Computer DB(TM) 1983-2004/Aug 23
         (c) 2004 The Gale Group
File  47:Gale Group Magazine DB(TM) 1959-2004/Aug 23
         (c) 2004 The Gale group
File  75:TGG Management Contents(R) 86-2004/Aug W3
         (c) 2004 The Gale Group
File 636:Gale Group Newsletter DB(TM) 1987-2004/Aug 23
         (c) 2004 The Gale Group
File  16:Gale Group PROMT(R) 1990-2004/Aug 23
         (c) 2004 The Gale Group
File 624:McGraw-Hill Publications 1985-2004/Aug 20
         (c) 2004 McGraw-Hill Co. Inc
File 484:Periodical Abs Plustext 1986-2004/Aug W2
         (c) 2004 ProQuest
File 613:PR Newswire 1999-2004/Aug 22
         (c) 2004 PR Newswire Association Inc
File 813:PR Newswire 1987-1999/Apr 30
         (c) 1999 PR Newswire Association Inc
File 141:Readers Guide 1983-2004/Jul
         (c) 2004 The HW Wilson Co
File 696:DIALOG Telecom. Newsletters 1995-2004/Aug 20
         (c) 2004 The Dialog Corp.
File 553:Wilson Bus. Abs. FullText 1982-2004/Jul
         (c) 2004 The HW Wilson Co
File 621:Gale Group New Prod.Annou.(R) 1985-2004/Aug 23
         (c) 2004 The Gale Group
File 674:Computer News Fulltext 1989-2004/Aug W2
         (c) 2004 IDG Communications
File  88:Gale Group Business A.R.T.S. 1976-2004/Aug 20
         (c) 2004 The Gale Group
File 369:New Scientist 1994-2004/Aug W2
         (c) 2004 Reed Business Information Ltd.
File 160:Gale Group PROMT(R) 1972-1989
         (c) 1999 The Gale Group
File 635:Business Dateline(R) 1985-2004/Aug 21
```

(c) 2004 ProQuest Info&Learning
File 15:ABI/Inform(R) 1971-2004/Aug 21
(c) 2004 ProQuest Info&Learning
File 9:Business & Industry(R) Jul/1994-2004/Aug 20
(c) 2004 The Gale Group
File 13:BAMP 2004/Aug W3
(c) 2004 The Gale Group
File 810:Business Wire 1986-1999/Feb 28
(c) 1999 Business Wire
File 610:Business Wire 1999-2004/Aug 22
(c) 2004 Business Wire.
File 647:CMP Computer Fulltext 1988-2004/Aug W2
(c) 2004 CMP Media, LLC
File 98:General Sci Abs/Full-Text 1984-2004/Jul
(c) 2004 The HW Wilson Co.
File 148:Gale Group Trade & Industry DB 1976-2004/Aug 23
(c)2004 The Gale Group
File 634:San Jose Mercury Jun 1985-2004/Aug 20
(c) 2004 San Jose Mercury News

22/3,K/8 **(Item 8 from file: 275)**
DIALOG(R)File 275:Gale Group Computer DB(TM)

01450753 SUPPLIER NUMBER: 11282045 (USE FORMAT 7 OR 9 FOR FULL TEXT)
Programming with sockets. (an abstraction for an endpoint of communication) (includes related articles on Internet addresses, connectionless communication and on network configuration) (tutorial)
Tomassini, Marco
C Users Journal, v9, n9, p39(14)
Sept, 1991
DOCUMENT TYPE: tutorial ISSN: 0898-9788 LANGUAGE: ENGLISH
RECORD TYPE: FULLTEXT; ABSTRACT
WORD COUNT: 5000 LINE COUNT: 00409

... addressed. Partial reads are never an issue in Datagram transmission, because the datagram protocol preserves **message boundaries** . The second example shows how to use datagram **sockets** . The server (see Listing 3) can give information on the services **registered** on the machine on which it is running. In this example's client-server relationship, a local or remote client (see Listing 4) **sends** a **message** with the name of a service, e.g., telnet, to the server. (There are of...

...are written by the system and need not concern us here.) On receipt of the **message** , the server looks up the service name in the local-services database. If it finds the name, it builds a **message** that contains the service name, the port number, and the protocol used by the service and **sends** it back to the client. If the service does not exist, the response will contain...

22/3,K/26 (Item 3 from file: 674)

068208
Say what?
Byline: Eric Hindin
Journal: Network World Page Number: 37
Publication Date: August 17, 1998
Word Count: 2304 Line Count: 223

Text:
... packet where delay, throughput and reliability service attributes can be specified. The latest version of **Winsock** in Windows 98 and NT lets administrators use applications to set the field. With the...packets. A queuing algorithm determines the order in which packets stored in the queues are **transmitted** . The idea is to give better service to high-priority traffic while ensuring, to varying...

... dictates that the queues are serviced on a round-robin basis. The algorithm specifies the **transmission** of two packets from Queue 1 (the high-priority queue) for every one packet **transmitted** from Queues 2 and 3. Same-priority packets are **transmitted** from within each queue on a first in, first out (FIFO) basis. If congestion occurs...
...guarantee crucial data will reach its destination in a timely manner; it only ensures that **high** -priority **packets** will get there before low-priority packets. More sophisticated QoS systems solve this problem with...

... from low-priority queues to service high-priority traffic, and vice-versa.Basic queuing algorithms **transmit** packets from the same queue in a FIFO order. Large frames associated with a high-priority file **transfer** may delay a transaction processing application that passes small amounts of data, even though packets...

... prioritization and greater fairness. For example, administrators could establish a queue to give preference to **high** -priority **packets** that need to travel to a far-flung destination.Per-flow queuing establishes queues on ...

... based on MMC Networks' Anyflow 5500 chip set, including the Cisco Catalyst 8500 and Arrowpoint **Communications** ' Content Smart Switch. But the trade-off associated with increasing the number of queues is...

...mechanisms are other important aspects of QoS. Congestion control allows end stations to throttle their **transmission** rates and slow traffic if the network drops packets. TCP/IP and SNA have supported...

...form, RED randomly drops packets as queues fill up, causing end stations to decrease their **transmission** rates so queues won't overflow. Weighted RED (WRED) improves on RED by dropping packets...

...maximum amount of time any cell can be delayed is the time it takes to **transmit** one cell. Borrowing from ATM, router and switch vendors are adding segmentation capabilities to their...

... to ensure consistent QoS within the router. Several frame relay equipment vendors segment packets for **transmission** over WAN links as a means of ensuring predictable **delivery** and minimal delay.Traffic metering is another form of traffic shaping. A number of protocols such as AppleTalk exhibit a tendency to **transmit** packets unevenly, which is sometimes known as creating trains of packets. Traffic metering spaces out the trains prior to **transmission** by temporarily storing packets in **buffers** to make sure the network isn't overloaded. Metering also can be used at the...8000 LAN switches.Cabletron pioneered the idea of policy-based management in 1994 when it **announced** SecureFast Virtual Networking. SecureFast wasn't successful in gaining market acceptance, but the technology will...

22/3,K/35 **(Item 1 from file: 610)**
DIALOG(R)File 610:Business Wire

00540701 20010619170B1060 (USE FORMAT 7 FOR FULLTEXT)
Register.com Teams with Registro Brasil to Provide Domains and Digital Security to Latin America's Largest Internet Market-Leading Brazilian Registrar Adopts Register.com's Infrastructure for Domains and Digital Certificates
Business Wire
Tuesday, June 19, 2001 08:32 EDT
JOURNAL CODE: BW LANGUAGE: ENGLISH RECORD TYPE: FULLTEXT
DOCUMENT TYPE: NEWSWIRE
WORD COUNT: 951

...Internet market," said
Cristiana Parada, Vice President of Registro Brasil.

Register.com will provide domain **registration** services to Registro Brasil through its proprietary **socket** -level Application **Programming Interface** (API),
Third Party Protocol (TPP). TPP allows partners to access Register.com's entire suite of **registration** services, from WHOIS queries to online domain
management. With TPP, a Registro Brasil can seamlessly connect Register.com **registration** capability to its own front end to match the "look and feel" of
its web...

```
Set     Items   Description
S1      19289   TRANSFER? OR COMMUNICATION? OR TRANSMIT? OR SEND? OR EXCHA-
             NG? OR RECEIV? OR DELIVER? OR TRANSMISSION
S2        925   (SIZE OR LENGTH OR DATA OR DATABLOCK? OR MESSAG? OR BIT OR
             BYTE? OR MEGABIT? OR MEGABYTE? OR BLOCK? OR PACKET?)(2N)(THRE-
             SHOLD? OR LIMIT? OR BOUNDAR? OR HIGH? OR GREATEST? OR MOST? OR
              LONGEST OR LARGEST)
S3       1344   CACHE? OR BUFFER? OR TEMPORAR?()(MEMOR? OR STORAGE) OR REG-
             ISTER?
S4         13   (SOCKET? OR WINSOCK? OR ENDPOINT? OR CONNECTION?)(3N)(API -
             OR MPI OR PROGRAM?()INTERFACE? OR MESSAGE()PASSING()INTERFACE?
              OR MPIS OR APIS)
S5        428   REGISTRATION OR PREREGIST?
S6       8214   NOTIF? OR WARN? OR ALERT? OR ANNOUNC? OR ACKNOWLEDGE? OR M-
             ESSAG?
S7      17310   EFFICIENC? OR EFFICAC? OR EFFECTIV? OR ABILIT? OR CAPABILI-
             T? OR PERFORMANC? OR SUITABILIT?
S8         12   S4 AND (S1 OR S2 OR S3 OR S6 OR S5 OR S7)
S9         11   S8 NOT PY>2001
S10        11   S9 NOT PD>20011201
S11         9   S10 AND S1
File 256:TecInfoSource 82-2004/Jul
         (c)2004 Info.Sources Inc
```

11/3,K/1
DIALOG(R)File 256:TecInfoSource

02514519 DOCUMENT TYPE: Company

Frontier Technologies Corp (514519)
1105 Waverly Way
McLean, VA 22101 United States
TOLL FREE TELEPHONE NUMBER: (800) 929-3054
HOMEPAGE: http://www.frontiertech.com
EMAIL: superTCP@frontiertech.com

RECORD TYPE: Directory

CONTACT: Sales Department

ORGANIZATION TYPE: Corporation
EQUITY TYPE: Private
STATUS: Active

NUMBER OF EMPLOYEES: 50
SALES: NA

DATE FOUNDED: 1982
REVISION DATE: 20031204

...Technologies Corporation develops and manufacturers award-winning computer software and hardware designed to provide total **communications** solutions for networks users. Frontier Technologies' products provide complete network connectivity between users of dissimilar...

...provided the first MIME Multimedia Email for Windows, the first commercial implementation of the Windows **Sockets API** industry standard, the first Windows-based newsreader, the first dual-mode implementation of TCP/IP...

DESCRIPTORS: **Communications** Protocols; Internet Utilities

11/3,K/2
DIALOG(R)File 256:TecInfoSource

01405426 DOCUMENT TYPE: Product

PRODUCT NAME: PCShare 3.0 (405426)

HELIOS Software GmbH (647098)
Steinriede 3 D-30827
Garbsen, Germany
TELEPHONE: ( ) 513-1709320

RECORD TYPE: Directory

CONTACT: Sales Department

REVISION DATE: 20020919

...with the appropriate PCShare extension. PCShare allows any standard Windows program to use its networking **capabilities** by means of the Microsoft **WinSock API** , allowing users access to Oracle or Sybase databases, emulate terminals with KeaTerm or teemtalk and...

...PC drives or with diskless boot. PCShare is based on standards including proven TCP/IP **communications** , UNIX systems, a **WinSock program interface** , an ODI network driver interface, and more. PCShare ensures a smooth growth path. It scales...

DESCRIPTORS: Data **Communications** ; Integration Software; Network Servers; Network Software; Terminal Emulators

11/3,K/3
DIALOG(R)File 256:TecInfoSource
(c)2004 Info.Sources Inc. All rts. reserv.

01124818 DOCUMENT TYPE: Product

PRODUCT NAME: iSuite (124818)

Fastrax Oy (730084)
Valimotie 7 01510
Vantaa, Finland
TELEPHONE: ( ) 098-2409690

RECORD TYPE: Directory

CONTACT: Sales Department

REVISION DATE: 20021230

...that can be used in developing applications for the iTrax02/8 global positioning system (GPS) **receiver** . iSuite encompasses C compiler, symbolic assembler, archive, link, load, profile, and simulator components. It also...

...acquisition engine streamlines correlator initialization tasks. iSuite's GPS Navigation Library component has peripheral application **programming interfaces** (**APIs**) that support **connections** with serial **communication** and other devices. A utility API library supports UTC/GPS time, datum, and other transformation processes. iSuite also includes **connection** and configuration **APIs** .

11/3,K/4
DIALOG(R)File 256:TecInfoSource
(c)2004 Info.Sources Inc. All rts. reserv.

00135466 DOCUMENT TYPE: Review

PRODUCT NAMES: Java (573744); Telecommunications (830210)

TITLE: Jibe with Java: The New-Generation Telecom Service Creation...
AUTHOR: McGuire, Tom
SOURCE: Internet Telephony, v4 n10 p54(3) Oct 2001
ISSN: 1098-0008
HOMEPAGE: http://www.internettelephony.com

RECORD TYPE: Review
REVIEW TYPE: Product Analysis
GRADE: Product Analysis, No Rating

REVISION DATE: 20020228

...Public Switched Telephone Network (PSTN). Web-based access technologies are driving Web conferencing, customized content **delivery** , and instant **messaging** services. Addressing PSTN and Internet-based development demands, programmers must tap new, streamlined service creation...
...is being used to create Web-based technologies. It has defined SS7 and other network **connection** application **programming interfaces** (**APIs**). Additionally, Java supports a 'write once, run anywhere' approach. Finally, its graphical-based environment speeds...

11/3,K/5

DIALOG(R)File 256:TecInfoSource
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00133595 DOCUMENT TYPE: Review

PRODUCT NAMES: Microsoft Windows Socket API **(482307); Microsoft C Socket (065889); Socket++ (846562**

TITLE: Sockets
AUTHOR: Joch, Alan
SOURCE: Computerworld, v35 n37 p53(1) Sep 10, 2001
ISSN: 0010-4841
HOMEPAGE: http://www.computerworld.com

RECORD TYPE: Review
REVIEW TYPE: Product Analysis
GRADE: Product Analysis, No Rating

REVISION DATE: 20020819

PRODUCT NAMES: Microsoft Windows Socket API **(**

...Csocket File are described in a discussion that defines 'sockets' as 'a method for establishing **communications** links between a client program and a server program across a LAN, a WAN or...

...because intercommunicating devices have their own numerical addresses and become the venues for bi-directional **communication** . The labels 'client' and 'server' are used to differentiate the computer doing the calling from the one **receiving** the call. Computers with server sockets maintain an open **communication** port, which is ready for unscheduled incoming calls. Clients generally use the Domain Naming System...

11/3,K/6
DIALOG(R)File 256:TecInfoSource
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00127579 DOCUMENT TYPE: Review

PRODUCT NAMES: Centerwise (026824)

TITLE: Centricity Software's Centerwise
AUTHOR: Angel, Jonathan
SOURCE: Network Magazine, v15 n10 p30(1) Oct 2000
ISSN: 1093-8001
HOMEPAGE: http://www.networkmagazine.com

RECORD TYPE: Review
REVIEW TYPE: Product Analysis
GRADE: Product Analysis, No Rating

REVISION DATE: 20020630

...not network-aware and cannot know when a network is overloaded; applications also have no **ability** to prioritize transactions. Centerwise resides between applications and the network to provide session-layer control...
...NT/2000 and once available can interact with and control any applications that use the **WinSock** application **programming interface** (**API**). Centerwise Agent never stops monitoring, recording, and analyzing application and network activity and **sends warnings** when bandwidth utilization exceeds a set threshold. Operating at layer 7, Centerwise is configurable for particular applications, URLs, or filetypes. Agents also include Virtual Help Desk, which shows **messages** that provide more in-depth information about broken network links, server outages, and unavailability of...

DESCRIPTORS: IBM PC & Compatibles; LANs; Network Administration; Network Management; Network Software; **Performance** Monitors; QoS (Quality of Service); System Monitoring; System **Performance** ; Windows; Windows NT/2000

11/3,K/7
DIALOG(R)File 256:TecInfoSource

00121590 DOCUMENT TYPE: Review

PRODUCT NAMES: XML (837709); Extranets (837385)

TITLE: The Rush To XML: Technology will let companies interact more easil...
AUTHOR: Radding, Alan
SOURCE: Information Week, v767 p71(3) Jan 3, 2000
ISSN: 8750-6874
HOMEPAGE: http://www.informationweek.com

RECORD TYPE: Review
REVIEW TYPE: Product Analysis
GRADE: Product Analysis, No Rating

REVISION DATE: 20000330

Deployment of eXtensible Markup Language (XML)-based business-to- business (B2B) information access and **exchange** systems is not easy or straightforward for many users, says the CEO of Scriptics. Problems... ...mechanism for facilitating business interactions via the Web because it allows users to structure and **exchange** information without rewriting existing systems or adding significant new infrastructure in the form of middleware...

...without XML, his organization would have to develop custom code or use low-level application **programming interface** (**API**) **connections** . Vendors, including Bowstreet International, a business-to-business (B2B) Internet software and services company, are responding with XML tools that **deliver** services via the Web. Sabre Labs uses XML although it also has a seasoned electronic...

11/3,K/8
DIALOG(R)File 256:TecInfoSource

00117259 DOCUMENT TYPE: Review

PRODUCT NAMES: WebGain VisualCafe (651681); Sybase PowerJ (656909)

TITLE: Easier does it for Java Tools
AUTHOR: Barnes, Kevin Hayes, Garrett Michael
SOURCE: Computerworld, v33 n23 p106(2) Jun 7, 1999
ISSN: 0010-4841
HOMEPAGE: http://www.computerworld.com

RECORD TYPE: Review
REVIEW TYPE: Product Comparison
GRADE: Product Comparison, No Rating

REVISION DATE: 20030221

...staging. Both products have built-in database connectivity via Java Database Connectivity (JDBC), whose application **programming interface** (**API**) eases **connection** and **communication** with databases. With both products, the process is code-free.

11/3,K/9
DIALOG(R)File 256:TecInfoSource

00115555 DOCUMENT TYPE: Review

PRODUCT NAMES: Symantec pcAnywhere Windows & DOS (643297); WinProxy Windows 9x (723363)

TITLE: WinProxy & pcANYWHERE32
AUTHOR: Hitchcock, J A
SOURCE: Link-Up, v16 n2 p19(1) Mar/Apr 1999
ISSN: 0734-988X
HOMEPAGE: http://www.infotoday.com

RECORD TYPE: Review
REVIEW TYPE: Review
GRADE: A

REVISION DATE: 20030728

...breeze, and configuration is wizard-based. A working LAN is required, as is an installed **WinSock** application **programming interface** (**API**). Each computer is assigned a unique IP address, and proxy services are provided for many...
...priced pcAnywhere32 supports Windows 3.x/9x/NT and DOS, and provides encryption support. File **transfer** is quick, and SpeedSend allows the user to **send** only the changes to a file rather than the whole file. Infrared support is provided...

```
Set     Items   Description
S1         12   AU=(MACIEL F? OR MACIEL, F?)
S2          9   S1 AND IC=G06F?
File 347:JAPIO Nov 1976-2004/Apr(Updated 040802)
         (c) 2004 JPO & JAPIO
File 348:EUROPEAN PATENTS 1978-2004/Aug W02
         (c) 2004 European Patent Office
File 349:PCT FULLTEXT 1979-2002/UB=20040812,UT=20040805
         (c) 2004 WIPO/Univentio
File 350:Derwent WPIX 1963-2004/UD,UM &UP=200453
         (c) 2004  Thomson Derwent
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2/5/1 (Item 1 from file: 350)
DIALOG(R)File 350:Derwent WPIX

015875194 **Image available**
WPI Acc No: 2004-033025/200403
XRPX Acc No: N04-026123

Input/output (I/O) method for adapters, involves changing wait state of process requesting I/O operation to runnable, and restarting process when input/output operation on adapter is completed

Patent Assignee: HITACHI LTD (HITA)
Inventor: **MACIEL F B**

Number of Countries: 002 Number of Patents: 002
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
US 20030214909	A1	20031120	US 2002320607	A	20021217	200403	B
JP 2003330873	A	20031121	JP 2002139572	A	20020515	200403	

Priority Applications (No Type Date): JP 2002139572 A 20020515
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
US 20030214909	A1		15	H04J-001/16	
JP 2003330873	A		11	G06F-013/12	

Abstract (Basic): US 20030214909 A1

NOVELTY - The method involves performing input/output (I/O) operations by an InfiniBand adapter (6) based on a request received from processes (31, 32). A scheduler (41) keeps the process in I/O wait state when the adapter is performing the I/O operations. The process in the wait state is changed into runnable, and the processing, which requested the I/O operation is restarted when the I/O operation on the adapter is completed.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:

(a) a data processing device

(b) a program for directing a computer to execute processes in a specified order.

USE - Used in adapters connecting a disk unit and a network.

ADVANTAGE - The method shortens the processing time needed for handling interrupts, thereby enhancing the speed and efficiency in I/O processing.

DESCRIPTION OF DRAWING(S) - The drawing shows a block diagram illustrating the inputting/outputting method.

Kernel (4)
InfiniBand adapter (6)
Processes (31, 32)
Data (33, 34)
Scheduler (41)
pp; 15 DwgNo 1/8

Title Terms: INPUT; OUTPUT; METHOD; CHANGE; WAIT; STATE; PROCESS; REQUEST; OPERATE; RESTART; PROCESS; INPUT; OUTPUT; OPERATE; COMPLETE
Derwent Class: T01
International Patent Class (Main): **G06F-013/12** ; H04J-001/16
International Patent Class (Additional): **G06F-013/10**
File Segment: EPI

2/5/2 **(Item 2 from file: 350)**
DIALOG(R)File 350:Derwent WPIX

015741172 **Image available**
WPI Acc No: 2003-803373/200375
XRPX Acc No: N03-644022

Storage method for web site server, involves writing difference between data saved in odd and new virtual volumes to detached storage mechanisms

Patent Assignee: HITACHI LTD (HITA); MACIEL F B (MACI-I)
Inventor: **MACIEL F B**

Number of Countries: 002 Number of Patents: 002
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
US 20030191840	A1	20031009	US 2002226152	A	20020823	200375	B
JP 2003296035	A	20031017	JP 2002104965	A	20020408	200377	

Priority Applications (No Type Date): JP 2002104965 A 20020408
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
US 20030191840	A1		21	G06F-015/173	
JP 2003296035	A		13	G06F-003/06	

Abstract (Basic): US 20030191840 A1

NOVELTY - The data is stored in a portion or all of the storage mechanism of virtual volume (21). One or more storage mechanisms are detached and then matched to new virtual volume. The difference between the data saved in odd and new virtual volumes is written to the moved storage mechanism.

DETAILED DESCRIPTION - An INDEPENDENT CLAIM is also included for storage device.

USE - For updating contents stored in shared storage.

ADVANTAGE - Reduces the size and power consumption of server by decreasing the number of storage devices. The degradation in the quality of service is prevented.

DESCRIPTION OF DRAWING(S) - The figure shows a schematic view of web site.

shared storage device (1)
virtualization engine (20)
virtual volume (21)
pp; 21 DwgNo 1/16

Title Terms: STORAGE; METHOD; WEB; SITE; SERVE; WRITING; DIFFER; DATA; SAVE ; ODD; NEW; VIRTUAL; VOLUME; DETACH; STORAGE; MECHANISM
Derwent Class: T01
International Patent Class (Main): **G06F-003/06 ; G06F-015/173**
International Patent Class (Additional): **G06F-012/00**
File Segment: EPI

2/5/5 **(Item 5 from file: 350)**
DIALOG(R)File 350:Derwent WPIX

015387427 **Image available**
WPI Acc No: 2003-448372/200342
XRPX Acc No: N03-357678

Computer resource allocation method for computer system, involves changing server allocation based on server load, by dynamically changing virtual local area network, to maintain allocated computer within respective VLAN

Patent Assignee: HITACHI LTD (HITA); MACIEL F B (MACI-I); SHONAI T (SHON-I); TARUI T (TARU-I); YOSHIMURA Y (YOSH-I)
Inventor: **MACIEL F B** ; SHONAI T; TARUI T; YOSHIMURA Y
Number of Countries: 002 Number of Patents: 002
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
US 20030069972	A1	20030410	US 200280715	A	20020225	200342	B
JP 2003124976	A	20030425	JP 2001312115	A	20011010	200342	

Priority Applications (No Type Date): JP 2001312115 A 20011010
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
US 20030069972	A1		45	G06F-015/173	
JP 2003124976	A		33	H04L-012/56	

Abstract (Basic): US 20030069972 A1

NOVELTY - The load of each server is allocated to clients (A,B) through a virtual local area network (VLAN). Based on the monitored load, the servers allocated to clients are changed by dynamically changing the VLAN. The computer allocated to each client is maintained within the respective VLAN.

DETAILED DESCRIPTION - An INDEPENDENT CLAIM is also included for charging method in server system.

USE - For allocating computer resources in computer system connected to VLAN, virtual private network (VPN) and Internet.

ADVANTAGE - Raises user security by minimizing the manager load in data center irrespective of dynamic network configuration. Ensures quick execution of process due to dynamic change of network load according to server, and real-time allocation of network resources.

DESCRIPTION OF DRAWING(S) - The figure shows an outline block diagram of VPN with clients connected to data center.

clients (A,B)

pp; 45 DwgNo 1/32

Title Terms: COMPUTER; RESOURCE; ALLOCATE; METHOD; COMPUTER; SYSTEM; CHANGE ; SERVE; ALLOCATE; BASED; SERVE; LOAD; DYNAMIC; CHANGE; VIRTUAL; LOCAL; AREA; NETWORK; MAINTAIN; ALLOCATE; COMPUTER; RESPECTIVE
Derwent Class: T01
International Patent Class (Main): **G06F-015/173** ; H04L-012/56
International Patent Class (Additional): **G06F-015/177** ; H04L-012/28
File Segment: EPI

2/5/6 (Item 6 from file: 350)

014870106 **Image available**
WPI Acc No: 2002-690812/200274
XRPX Acc No: N02-544965

Computer system has external server that controls allocation of input/output adapters for each partitions of system

Patent Assignee: HITACHI LTD (HITA)
Inventor: KAMEYAMA S; **MACIEL F B** ; SHONAI T; TARUI T

Number of Countries: 002 Number of Patents: 002
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
US 20020112102	A1	20020815	US 2001941734	A	20010830	200274 B
JP 2002215408	A	20020802	JP 200115196	A	20010124	200274

Priority Applications (No Type Date): JP 200115196 A 20010124
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
US 20020112102	A1		28	G06F-003/00	
JP 2002215408	A		15	G06F-009/46	

Abstract (Basic): US 20020112102 A1

NOVELTY - An external server controls the allocations of the input/output (I/O) adapters (100,101) for each partition of the system.

DETAILED DESCRIPTION - An INDEPENDENT CLAIM is included for input/output adapter.

USE - Computer system.

ADVANTAGE - Since the control is provided automatically to the partitions and the I/O adapters, the I/O capacity used by each partition is controlled, independent of the CPU allocation.

DESCRIPTION OF DRAWING(S) - The figure shows the block diagram of the computer system.

I/O adapters (100,101)

pp; 28 DwgNo 1/20

Title Terms: COMPUTER; SYSTEM; EXTERNAL; SERVE; CONTROL; ALLOCATE; INPUT; OUTPUT; PARTITION; SYSTEM
Derwent Class: T01; T04
International Patent Class (Main): **G06F-003/00** ; **G06F-009/46**
International Patent Class (Additional): **G06F-013/10**
File Segment: EPI

2/5/7 **(Item 7 from file: 350)**
DIALOG(R)File 350:Derwent WPIX

014815387 **Image available**
WPI Acc No: 2002-636093/200268
XRPX Acc No: N02-502586

Data communication method for transferring data between memories, involves sending data directly to preallocated buffer or registering new memory region in receiving side computer based on received data length threshold

Patent Assignee: HITACHI LTD (HITA)
Inventor: **MACIEL F B**

Number of Countries: 002 Number of Patents: 002
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
US 20020095471	A1	20020718	US 2001918639	A	20010801	200268	B
JP 2002208981	A	20020726	JP 20014399	A	20010112	200268	

Priority Applications (No Type Date): JP 20014399 A 20010112
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
US 20020095471	A1		23	G06F-015/167	
JP 2002208981	A		11	H04L-029/06	

Abstract (Basic): US 20020095471 A1

NOVELTY - A data processor sends a data length threshold upto which the processor is able to store data to be receive in a pre-allocated buffer, to another data processor. The other data processor selects a transfer operation which directly send data to the preallocated memory or which registers another memory region to store data to be sent based on the received data length threshold.

USE - For transferring data between memories of computers connected using communication network such as internet or intranet.

ADVANTAGE - The data is directly sent to preallocated buffer when data length is smaller than a threshold. Therefore, time for memory registration and data reception process is reduced. Thus processing efficiency of the computer system are improved and network bandwidth occupied uselessly is reduced.

DESCRIPTION OF DRAWING(S) - The figure shows the block diagram of the software structure of a host computer performing communication using fast sockets.

pp; 23 DwgNo 3/13

Title Terms: DATA; COMMUNICATE; METHOD; TRANSFER; DATA; MEMORY; SEND; DATA; BUFFER; REGISTER; NEW; MEMORY; REGION; RECEIVE; SIDE; COMPUTER; BASED; RECEIVE; DATA; LENGTH; THRESHOLD
Derwent Class: T01; W01
International Patent Class (Main): **G06F-015/167** ; H04L-029/06
International Patent Class (Additional): **G06F-015/173**
File Segment: EP

2/5/9 (Item 9 from file: 350)
DIALOG(R)File 350:Derwent WPIX

011999396 **Image available**
WPI Acc No: 1998-416306/199836
XRPX Acc No: N98-324150

Interconnection load balancing for multiple routers in parallel processing system - by obtaining amount of network traffic flow between devices and selecting routes according to traffic flow to balance traffic flow

Patent Assignee: HITACHI LTD (HITA)
Inventor: HIGUCHI T; KITAI K; **MACIEL F B** ; MURAHASHI H; YOSHIZAWA S
Number of Countries: 026 Number of Patents: 003
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
EP 858189	A2	19980812	EP 98101286	A	19980126	199836	B
JP 10224400	A	19980821	JP 9722402	A	19970205	199844	
US 6112248	A	20000829	US 9818564	A	19980204	200043	

Priority Applications (No Type Date): JP 9722402 A 19970205
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
EP 858189	A2	E	27	H04L-012/46	
Designated States (Regional): AL AT BE CH DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT RO SE SI					
JP 10224400	A		16	H04L-012/56	
US 6112248	A			G06F-015/173	

Abstract (Basic): EP 858189 A

The networking method involves two networks. Each network interconnects several data processing devices and is interconnected by a subset of the data processing devices. A networking method selects routes to balance network traffic among the data processing devices that interconnect the two networks.

The amount of network traffic flow between the data processing devices of the two networks is obtained. For each data processing device routes the amount of network traffic flow is selected, in a way that network traffic flow between the data processing devices that interconnects the two networks is distributed among the data processing devices of the second network, so that the network traffic flow among the data processing devices interconnects the two networks is balanced.

ADVANTAGE - Reduces bottleneck caused by imbalanced traffic flow. Improves reliability of Proxy ARP.

Dwg.6/21

Title Terms: INTERCONNECT; LOAD; BALANCE; MULTIPLE; ROUTER; PARALLEL; PROCESS; SYSTEM; OBTAIN; AMOUNT; NETWORK; TRAFFIC; FLOW; DEVICE; SELECT; ROUTE; ACCORD; TRAFFIC; FLOW; BALANCE; TRAFFIC; FLOW
Index Terms/Additional Words: ADDRESS; RESOLUTION; PROTOCOL
Derwent Class: T01; W01
International Patent Class (Main): **G06F-015/173** ; H04L-012/46; H04L-012/56
File Segment: EPI

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Set     Items   Description
S1         96   AU=(MACIEL F? OR MACIEL F?)
S2          0   S1 AND (BUFFER? OR CACHE? OR TEMPORARY()(MEMOR? OR STORAGE-
              ?))
S3          1   S1 AND (BUFFER? OR CACHE? OR MEMOR? OR API OR DATA()(COMMU-
              NICATION? OR TRANSFER? OR SEND? OR RECEIV? OR STORAGE?))
File   2:INSPEC 1969-2004/Aug W2
         (c) 2004 Institution of Electrical Engineers
File   6:NTIS 1964-2004/Aug W3
         (c) 2004 NTIS, Intl Cpyrght All Rights Res
File   8:Ei Compendex(R) 1970-2004/Aug W2
         (c) 2004 Elsevier Eng.  Info. Inc.
File  34:SciSearch(R) Cited Ref Sci 1990-2004/Aug W3
         (c) 2004 Inst for Sci Info
File  35:Dissertation Abs Online 1861-2004/Jul
         (c) 2004 ProQuest Info&Learning
File  65:Inside Conferences 1993-2004/Aug W3
         (c) 2004 BLDSC all rts. reserv.
File 148:Gale Group Trade & Industry DB 1976-2004/Aug 19
         (c)2004 The Gale Group
File  94:JICST-EPlus 1985-2004/Jul W4
         (c)2004 Japan Science and Tech Corp(JST)
File 636:Gale Group Newsletter DB(TM) 1987-2004/Aug 19
         (c) 2004 The Gale Group
File 275:Gale Group Computer DB(TM) 1983-2004/Aug 19
         (c) 2004 The Gale Group
File 647:CMP  Computer Fulltext 1988-2004/Aug W2
         (c) 2004 CMP Media, LLC
File 674:Computer News Fulltext 1989-2004/Jul W4
         (c) 2004 IDG Communications
File  20:Dialog Global Reporter 1997-2004/Aug 19
         (c) 2004 The Dialog Corp.
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3/5/1 **(Item 1 from file: 94)**
DIALOG(R)File 94:JICST-EPlus

03835573 JICST ACCESSION NUMBER: 98A1005107 FILE SEGMENT: JICST-E
Research on Parallel Networking for TCP/IP Communication.
KITAI KATSUYOSHI (1); KAGIMASA TOYOHIKO (1); YOSHIZAWA SATOSHI (2); **MACIEL F** (2); INAGAMI YASUHIRO (2)
(1) Hitachi, Ltd.; (2) Hitachi, Ltd., Cent. Res. Lab.
Joho Shori Gakkai Ronbunshi(Transactions of Information Processing Society of Japan), 1998, VOL.39,NO.11, PAGE.3044-3053, FIG.9, TBL.3, REF.20
JOURNAL NUMBER: Z0778AAZ ISSN NO: 0387-5806
UNIVERSAL DECIMAL CLASSIFICATION: 681.3.066 681.3:654
LANGUAGE: Japanese COUNTRY OF PUBLICATION: Japan
DOCUMENT TYPE: Journal
ARTICLE TYPE: Original paper
MEDIA TYPE: Printed Publication
ABSTRACT: This paper discusses the parallel networking feature that supports performance scalability to the number of network interfaces. On our experimental parallel processor, Paradise (Parallel and Data-way Oriented Information Server), we have developed a new IP routing feature that allows every network interface to communicate to and from the same client processor, thus providing scalable high-performance communication not only for a single session by using multiple network interfaces, but also for total system throughput by balancing the sessions among the network interfaces. The results of performance evaluation, using six Ethernet nodes on Paradise, ATM-LAN and three workstations, has demonstrated the effectiveness of this parallel networking feature. (author abst.)
DESCRIPTORS: TCP-IP; parallel computer; operating system; UNIX; parallel processing; duplex communication; routing; load sharing; ATM network; LAN; scalablity(computer); **data transfer**
BROADER DESCRIPTORS: protocol; rule; digital computer; computer; hardware; system program; computer program; software; treatment; communication system; method; selection; communication operation; operation(processing); communication network; information network; network; computer network; performance evaluation; evaluation
CLASSIFICATION CODE(S): JD03020J; JC03000K